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STEPHEN SMITH, M.D.

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Original Lectures.

LECTURES ON MILITARY SURGERY,

DELIVERED AT THE

COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.

By WILLIAM DETMOLD, M.D.,

PROFESSOR OF MILITARY SURGERY AND HYGIENE.

LECTURE III.

Gunshot Wounds of the Chest, Abdomen, and Lower Extremities.—Resections.—Dressings of Compound Fractures.

Gentlemen:—At the conclusion of our last lecture, we considered the important question as to the propriety of leaving open or closing penetrating chest wounds. There is another question in the treatment of these grave cases about which there is some discrepancy among the authorities; I allude to bloodletting: some contending that nothing but the most liberal use of the lancet can save the life of these wounded by reducing the circulation to what is termed the vita minima, while others as strongly condemn this practice. Now, as a general rule, wounded men do not bear well depletion; in most cases the soldier's constitution has already been weakened by fatigue, exposure, and camp diet, and the wounded men want all the stamina to withstand the effects of prolonged and perhaps profuse suppuration in the hospitals, where in many cases the means are deficient for building up an enfeebled constitution. I would, therefore, strongly recommend to you a remedy, which, while it gives you all the advantages to be derived from copious and repeated venesections, is free from all its injurious results; this remedy consists in applying ligatures to the limbs by a circular pressure to the upper parts of the arms and thighs, tight enough to check superficial venous circulation without affecting the deeper arterial influx of blood. By this means, which is easily put into execution, you may temporarily withdraw any amount of blood from circulation without depriving the wounded of a single drop, the want of which might seriously affect his recovery; for when the momentary and imminent danger to life has ceased, that is, when the pulmonary hæmorrhage has stopped, you gradually loosen the ligatures and allow the blood which you have retained for a while harmlessly in the extremities to re-enter the circulation. I should state, if I have not done so before, that all I have said refers to hæmorrhage from the wounded lung, for if the hæmorrhage should come from a wounded intercostal or the internal mammary, which, however, are comparatively rare cases, ligature of the bleeding vessel is the proper remedy.

Having thus done for a penetrating chest wound all that the urgency of the case requires, you must place the patient in the ambulance with the strict injunction that he shall lie on the wounded side. In this way you favor the exit of blood from the wound, you give the uninjured lung the best chance of free respiration, and you prevent the blood which may accumulate in the wounded side of the thorax from pressing upon the heart and upon the other lung, and thereby interfering with their functions.

Penetrating wounds of the abdomen with lesion of the abdominal organs, furnish a much more unfavorable prognosis than penetrating chest wounds; in these wounds a new element comes into action, namely, the effusion of the contents of the intestines into the peritoneal cavity, which always leads to fatal peritonitis. I am aware that there are cases on record where men have recovered from such wounds, but they are rare and exceptional cases; there seem to be some men who are not destined to be killed by powder and ball. All you can do in such wounds is, if the wounded intestine is easily discovered and got at, to put a ligature through the part and fasten it to the external wound, giving the patient a chance for the formation of an artificial anus, and give the wounded a large dose of opium to diminish as much as possible the peristaltic motion; you may assist this by a tolerable tight roller around the abdomen.

We come now to the most important class of wounds, the wounds of the extremities; most important I say, because they constitute by far the majority of the casualties of war, and because they offer a larger scope for the judgment and skill of the surgeon. We have already in our general remarks spoken of the necessity of arresting primary hæmorrhage, and of the manner of doing so either by ligature of the artery or by local compression. One of the gravest questions is, whether a wounded limb can be preserved or must be amputated to save life? The rules which govern us in civil practice must undergo certain modifications in war in deciding this question. The distance of transportation to the hospital, the mode of transportation, whether by land or water, the fact whether the army is victorious and advancing, or beaten and retreating; these, and many other circumstances, have their weight in this decision. Thus, when after the second disastrous battle of Bull Run, I went with twenty volunteer surgeons into the field, we found some twelve hundred seriously wounded who had been left for six days on the field without provision of any kind. The enemy, who had possession of the field, had sent word that all the wounded must be removed by a certain day. Under these circumstances a great many amputations had to be performed under the most unfavorable conditions, and at the most unfavorable period, not so much with a view of saving life, for I felt convinced that most of them would die, but simply for the purpose of making transportation possible.

Modern warfare, even if it has in some cases left unsettled the political point for which the war was undertaken, has settled the surgical question that whenever an operation is necessary the sooner it is performed the better, and that even a few hours' delay will decide the life of the wounded; in other words, it has established the preference of primary over secondary amputations, although formerly such authorities as John Hunter advocated the reverse. But it is not so easy to settle what kind of wounds make primary amputation necessary. All cases where a limb has been carried away by heavy projectiles should, by immediate amputation, be changed from lacerated wounds into good stumps; thus also guarding against secondary hæmorrhage from the lacerated vessels. Wherever there is a comminuted fracture with extensive laceration of the soft parts, especially when from the situation of the wound and the absence of pulse below the wound you have reason to believe that the large vessels and nerve are divided, you had better sacrifice the limb.

Resection is an invaluable gain which surgery has derived from modern warfare; the labors of Langenbeck and Stromeyer, who both in succession exercised the function of Surgeon-General in the Schleswig-Holstein war, have thrown the most instructive light upon this branch of conservative surgery.

We may distinguish two kinds of resections: the one, which is sometimes called exsection, where the articular extremities are removed, and thus the rest of the limb preserved; and the other, where the sharp extremities of the fractured bone are removed in the wound, which may be enlarged for the purpose.

As there is a vast difference in the prognosis of the wounds of the upper and lower extremities, which must duly influence our treatment, we will no longer mix up the two, but address our attention, first, to the wounds of the upper extremities.

These are infinitely less dangerous than those of the lower, and with an equal amount of injury an arm may be preserved where a leg should not. The upper extremity is also the proper province for exsection, for here the results are very favorable—whereas in the lower extremity they are uniformly unfavorable; thus, where the shoulder-joint has been destroyed by a gunshot wound, provided the shaft of the humerus is not splintered too far down, you may take off the head of the humerus, and a few inches of the shaft, as also the glenoid cavity of the scapula, and the man preserve a useful arm. The elbow-joint affords, perhaps, the most favorable field for resection. In injuries of the hand it is of the utmost importance to preserve as much as possible, even if it were only one phalanx of one finger; remove nothing from the hand where there is the slightest chance of preservation. Remove all loose splinters, trying to preserve the periosteum; and where the shaft is broken, so as to leave a sharp point, resect that point. I have introduced into our army chest an unpretending and simple improvement, which will facilitate this operation much, without increasing the bulk and number of the instruments: it consists of a piece of india-rubber tubing, a piece of which is drawn over a finger-saw, at the end of the saw, and another piece over the point; in this way you guard the soft parts against laceration by the teeth of the saw, leaving only that part of the saw free which is to act upon the bone. Wounds of the lower extremities are infinitely more grave than those of the upper extremity, and resection of the epiphyses gives an unfavorable result. Very few cases are on record in the annals of military surgery of recovery from resection, either of the head of the femur or of exsection of the knee-joint; and it was a judicious measure of our Surgeon-General, when, in a general order, he limited resections to the upper extremity. Exsection of the knee-joint being, therefore, out of the question, we have to add another case which necessitates immediate or primary amputation, that is, opening of the knee-joint, with fracture of the bones constituting it. Gunshot fractures of the femur are exceedingly fatal, and in view of this many surgeons consider such a fracture as sufficient indication for amputation. But amputations of the femur for such injuries are equally fatal; and I think I have seen more cases of recovery from gunshot fractures of the femur than recoveries after amputation. I myself have, in my private practice, been exceedingly unfortunate in my amputations of the thigh on account of injuries; I believe they have all died; whereas, in my thigh amputations on account of disease, I have obtained a very different result—they have almost all recovered. I am therefore in favor of not amputating the thigh unless the gunshot fracture at the thigh is complicated with some of the circumstances I have stated before. In all amputations it is of importance to operate as far from the trunk as possible, because the danger to life increases in the inverse ratio. You should, therefore, in wounds of the knee-joint, when the extremity of the femur is uninjured, exarticulate at the joint. This operation yields a good stump, and is less dangerous to life than amputation in the continuity of the femur. In amputations of the foot it is not so important to preserve small parts of the foot, perhaps one metatarsal bone, as we have seen it to be in the hand. The perfection to which the construction of artificial limbs has arrived, lessens the advantage; and the dangers attending a protracted suppuration in field hospitals counterbalance, in my opinion, that advantage entirely. Chopart's tarsal amputation, and Syme's amputation at the ankle-joint, I think, are preferable to all other methods, such as Pirogoff's osteoplastic amputation, because slight apparent advantages do not weigh against the dangers to which prolonged suppuration exposes the men in military hospitals.

The dressing of wounded extremities on the field must be simple. Avoid rollers—cover the splints simply by a compress and fasten them with tape. If you have a supply of splints, of course use them; but if you have none, or the supply gives out, use your judgment instead. (The Professor then showed the class the manner in which such simple dressings are applied.) The staves of barrels will make good splints. On the field of Bull Run we had nothing else. Straw dressing makes a first rate one for a fractured leg: you take a good handful of straw, bend it to the necessary length, wrap a piece of muslin, or of the man's shirt, if you have nothing else, around the straw, and apply it to the fractured leg. Three or four bayonet sheaths will answer, if you have nothing else. One of the very best modes of dressing compound fractures on the field is the plaster of Paris dressing. Take a stout compress of coarse cloth, soak it in a mixture of plaster of Paris and water, having about the consistency of cream, and apply it wet to the fractured limb, embracing the joint above and below the fracture, and apply a roller so as to make the dressing adapt itself exactly to the form of the wounded limb. In a few minutes the plaster of Paris will harden, you then remove the roller, and you have the fractured limb encased in an immovable case. If you have no material on hand for compresses, the wounded man will readily furnish it; slit open his pantaloons or his sleeve, soak it in the plaster, and you will have as good a dressing as can be desired. Before applying the plaster of Paris compress, you must rub some oil, or simple cerate, or any kind of grease upon the limb, or otherwise the hair will stick to the plaster, and make the removal of the dressing tedious and painful.

Original Communications.

CASES OF PARAPLEGIA

WITH OBSERVATIONS,

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CASE I.—*Uterine Hæmorrhage with Ulcer of the Cervix.—Relapsing reflex paraplegia upon the application of the induced electric current to the neck of the womb.*—Mrs. S——, a French lady, consulted me on the 22d of September last. She had been married six years, and enjoyed good health before this illness. Always menstruated regularly but with pain for one or two days previous to the menstrual discharge. She has miscarried twice, last time in February, 1861, and ever since remained troubled with white discharges, together with irregular painful menstruation. On leaving Europe, a month ago, she had felt the ordinary symptoms of pregnancy for about five months; and six days before her arrival at New York, she was attacked on board the steamer with a slow and painful hæmorrhage, and a dead fœtus with its placenta came away. This happened on the 5th of September; from that time the pains and hæmorrhage continued, the abdomen diminished in size, and she had milk in her breast until the 17th, five days ago. Now, she is very pale, thin, and in a very low condition; her pulse is frequent and soft, 87 to 90; respiration 32. Hands and feet rather cold, and wet with a constant perspiration. No cough, nor any sign of disease of the lungs and heart. Appetite lost, frequent nausea, and at times vomiting in the morning accompanied with giddiness—tongue whitish and moist—obstinate constipation with epigastric and abdominal tenderness. No retention of urine, nor any abnormal change in micturition; urine acid and slightly albuminous. Patient walks easily, but complains of wearying pain in the loins, thighs, and knees. No alteration whatever in the sensibility and motor power of the lower limbs.

The vaginal examination in the upright posture made me detect an anteversion of the womb, which was much enlarged and soft, as I could otherwise feel through the abdominal parietes. The uterus was extended to nearly an inch above the symphysis pubis. The neck soft, swelled and tender to the touch, was deeply torn and dilated enough to admit the finger, which returns from the examinatio covered with blood. The speculum shows the cervix torn and the seat of a red, irritable ulcer, mostly occupying th whole surface of the anterior lip. The sound easily passes into the cavity of the womb, the operation being, however, painful to the patient, causing bleeding both of the uterine cavity and of the ulcer. This condition of the womb suggested to me the idea of trying electricity for it. I supposed that this agent could prove effectual to determine contraction of the womb, and stoppage of the oozing hæmorrhage, which I attributed to its asthenic condition. Furthermore, the powerful influence of electricity to hasten the cicatrisation of ulcers, which I had recently observed in two cases,* made me likewise expect that this agent might equally contribute to ameliorate the uterine ulcer. Therefore, I decided upon employing this means, and I applied a mild induced current of Ruhmkorff's electro-medical apparatus, one of the electrodes placed in the pubes, and the other connected with a gutta-percha sound terminating in a metallic oval lip passed into the cervix. The intermittences of the current were very rapid, but scarcely was the apparatus at work, than to my great disappointment, the uterus, the loins, the hip-joints, and the lower limbs became the seat of a severe pain. Besides, there were numbness and tremor in the lower extremities, and the whole surface of the body was covered with profuse perspiration. The electric current was at once stopped: the uterus remained contracted, the pain subsided in a short time, but the lower limbs were already paralysed, so much so that the patient could not move them nor stand by herself. A foot-bath, shampooing, and frictions with a stimulating liniment made this unpleasant state disappear. However, a complete paralysis lasted about four hours, and it was not until fourteen hours from the use of electricity that the lower extremities recovered their perfect normal functions. Curious to remark, the secretion of milk, having stopped for five days, was again re-established upon the uterine excitation. The further details of the case are unimportant. The hæmorrhage yielded to astringents and tonics; local applications of the tincture of iodine and of nitrate of silver, and tepid injections with the chlorate of potash, made the uterine ulcer speedily heal, without any other symptom of reflex paralysis, and on the beginning of November, menstruation appeared preceded by slight pain in the loins, and weakness in the left leg. Very likely this dysmenorrhœa will continue sustained by the anteversion of the womb.

CASE II.—*Bleeding Piles.—Suppression of the periodical hæmorrhage producing spinal meningitis and paraplegia.—Cure.*—On the 7th of last November, I was called to see a gentleman, aged 34. He is unmarried, and states to have been ill for two days. He is a strong-looking man, of temperate habits, and for twelve years has suffered with bleeding piles, the hæmorrhage periodically occurring nearly every month. Two years ago, he was afflicted with a cerebral affection, and cured by Professor Rostan of Paris, who, according to the patient's statement, considered the disease a *subacute inflammation of the surface of the brain.* It seems that on that occasion the disease consisted in acute mania, supervening upon a protracted attack of intermittent fever, followed by a suppression, during three months, of the hæmorrhoidal discharge. The patient completely recovered from this attack, has enjoyed good health, and has had no other trouble, except gonorrhœa contracted two months ago, and attended with cystitis. This latter yielded to medical treatment, mostly consisting in the use of copaiba; but a gleet remained, and together with the periodical hæmorrhage disappeared under the use of sulphurous baths and other remedies, employed by the patient on his own account, and which at last determined great disturbance and sickness. Patient is not quite positive as to the time in which he took ill, but thinks it was on the 4th. He then had chills succeeded by great sensation of heat, was feverish all the night, and on arising the next morning he suddenly felt a violent pain in the dorsal and lumbar regions, with great stiffness and difficulty of moving the lower limbs. He also complained ever since of frequent necessity for passing water, which he voids with painful tenesmus, the urine being burning and highly colored. Bowels have been confined for four days, there is nausea, difficulty of breathing, with pain in the chest, and occasional cough without expectoration. On examining the patient, I found him lying on his right side, and in a state of opisthotonos from the contraction of the muscles of the back. He is free from any cerebral disorder, but very irritable; his countenance seems natural, pupils are equally dilated, no injection of the conjunctiva, nor any photophobia whatever. No giddiness either, and very little headache. Respiration labored, about 27 in the minute; Pulse quick, strong, and regular, 90. Nothing abnormal on auscultation of the chest. Patient chiefly directs my attention to the pain in the back, and in the limbs, which are as if sore; he feels besides a prickling sensation in the toes. Pressure upon the spine does not show any tenderness in one place more than in the other, but the least movement of the back is attended with severe pain. He is very weak, and if standing, he is much afraid of falling, as he does not perceive distinctly the impression of the floor; but he commands the movements of his lower extremities, and even supports himself without any aid. There is evident hyperesthesia of the skin in the abdomen and lower limbs; sensibility is likewise increased in the muscles, the least pressure upon them being attended with pain. The reflex power does not appear augmented, although at times there is an involuntary jerking of the legs. The urine, secreted in small quantity, is highly colored, and deposits a red precipitate, which tested is found to be of uric acid. There was no trace of albumen in the secretion.

I directed the patient to have twelve leeches put to the anus, and to promote the bleeding by a tepid poultice applied to the part. To take afterwards an injection with olei ricini, olei terebinthinæ, āā f. ℥j., olei crotonis ♏ vj., decoct. avenæ f. ℥iv., and to lie down all the time either on the side or on the belly. The local bleeding did not last to induce a notable amendment of the symptoms; the spasmodic contractions subsided a great deal, and the patient had a good rest during the night. He began on the next morning to use three times a day, five grains of ergot, and one eighth of a grain ext. belladonna, and a blister was applied to the lumbar region of the spine. This means, jointly with a cathartic pill composed with aloes Barb., ext. rhei, āā gr. j., taken every night, and a moderate diet, completed the cure in three weeks. The periodical hæmorrhage has been re-established, and I have advised the patient not to attempt again to suppress it. As to the gleet, it was attended with a stricture of the urethra, and treatment by progressive dilatation was instituted.

The foregoing cases are illustrations of the way by which paraplegia may be induced. The first is unquestionably a good evidence that peripheral irritations most likely go through the sympathetic, are pre-eminently the cause of reflex paralysis, inasmuch as it shows that the symptoms of the genito-urinary affection are not the consequence but really the cause of reflex paraplegia, notwithstanding the contrary opinion advanced by Dr. W. Gull. Neither could it be admitted with this author, that it is the inflammatory condition of the affected organs, and not the irritation, which leads to paralysis, for in this present case we had through the course of the disease an inflamed condition of the womb existing before and after application of electricity. Furthermore, the disappearance of the paralysis, occurring shortly upon the removal of the peripheral irritation, leaves no ground for doubt that a lesion of the spine might have pre-existed in a latent form, for such kind of lesions, although capable of originating sudden symptoms, are by far liable to let them disappear so suddenly. Besides, the co-existent secretion of milk, re-established by the same cause which brought about the paralytic condition of the lower limbs, is a new proof of the pure reflex character of the disease. I am not aware of any other instance of electricity producing such mischievous results, but certainly this is not the only case of relapsing paraplegia consequent upon uterine irritation. Dr. Nonat, in his practical work "On Diseases of the Uterus," Paris, 1860, p. 830, mentions a case of metritis in which "every inter-uterine cauterisation was followed with loss of consciousness, and momentaneous paralysis in the lower extremities." The same author reports several other instances alike which are in utter contradiction with the hypothesis of Dr. Gull.

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* In the first of these cases, I tried electricity on the suggestion of my friend Dr. J. T. Metcalfe. The ulcer, situated in the centre of the forehead, was of a decided syphilitic nature, and all specific remedies, efficient against other similar ulcers existing in the head, failed upon the former. Electricity, however, made it heal within a week. In the other case, the ulcer was a simple one, situated over the external face of the right shin-bone, and consequent upon injury to this part. Electricity alone made it heal speedily, and in both instances it was the extra-current of Ruhmkorff's apparatus which I used.

I did not think that in this case there was any relation between the state of the urine and the nervous trouble. The urine was acid, and contained a very little quantity of albumen, only noticeable when the liquid was boiled with nitric acid. There was no excess of uric acid, no sugar, and on microscopical examination, no renal tube, nor any fatty granules could be detected. As the secretion soon assumed its normal characters in the progress of treatment, I attributed the slight degree of albuminuria to the uterine hæmorrhage.

The influence of electricity on the development of paralysis is very remarkable. Indeed, it would be important to ascertain whether the nature of the current directed to the uterus may have any especial reflex effect upon the lower limbs; for it could not be supposed that the low intensity of that used in this case could have any great share in the production of paraplegia. As I stated before, it was the induced current, circulating in the fine wire, which I preferred, because that of the first helix, or thick wire, excites more the sensibility of the abdominal organs (bladder, rectum, uterus, testicles). This latter is the primary, or extra-current, running always in the same direction, and induced by the action of the spirals upon themselves; whilst the former alternately changes in direction, and is induced by the one upon the other wire. It is quite true, that the second reacts more upon the spinal cord, being therefore attended with more reflex effects, and perhaps there would be more reason to think that in this last peculiarity of the current, rather than in its intensity, must be the cause of the paralysis. In short, it is not my intention to enter into any theoretical explanation of the above curious phenomenon, but simply to guard against it on using an induced current in an *irritable* uterus. I should insist upon this irritable condition of the organ, not precisely on account of its bearing on the etiology of reflex paralysis, but because I would not like to inspire any distrust on the advantages of electricity in amenorrhœa, under which circumstances it is safe, and decidedly useful, the application of the induced current by putting one of the electrodes to the abdominal parietes over the womb and ovaries, and the other to the lumbar region, or to the neck of the womb.

The second case belongs to that kind of nervous derangements due to the suppression of a periodical hæmorrhage—a cause far from rare in the etiology of nervous diseases. The first cerebral affection and the spinal meningitis so closely following the disappearance of the rectal hæmorrhage, give evident proof that both were induced by this latter accident. Although in either cases, here recorded, paraplegia occurred suddenly, they differ, however, as to their nature. It will be observed that the condition of the lower limbs in the second case was, I may say, that of pseudo-paralysis; sensibility was impaired, patient felt weakness in the legs, and was afraid of standing, but yet he could support himself and command the movement of his lower limbs—a fact frequently met with in spinal meningitis, and distinguishing it from myelitis, always attended with true paralysis. With this disease also there is usually an increased reflex faculty not observed in simple meningitis; the jerkings in this latter are the result of irritation, or pressure, upon the origin of the spinal nerves, produced by the congestion of the meninges. But it may be, and often is the case that meningitis and myelitis accompany each other from the facility with which the inflammation extends itself to the tissue of the cord; and hence why, notwithstanding the above statement, an immense reflex faculty may be observed among the other symptoms of meningitis. It is useless to add that under such circumstances we have to contend with a complication of the disease.

The difficulty in respiration and the nausea, are easily accounted for by extension of the congestion to the dorsal region. The regularity of the pulse is a constant phenomenon to which Kohler has lately called the attention, as a distinctive character between meningitis and myelitis, in which the pulse is soft, feeble, and generally irregular. But what I would notice, as a no less important sign, is the condition of the bladder and urine. In this, as ordinarily in other cases of spinal meningitis, there was no retention of urine, so constant with myelitis; on the contrary, there was painful and frequent micturition, the secretion being highly colored and charged with uric acid. This excess of uric acid I consider a very constant symptom in dorsal and lumbar meningitis. I have always observed it since I look for it, and it may be valuable to fix the diagnosis between meningitis and myelitis; since it is very common to find the urine alkaline with this latter.

Finally, I did not suppose that in this case the disease went beyond its first period of congestion, as the exudations proper to the second and ultimate stages are attended with more permanent symptoms of paralysis, requiring therefore a longer treatment and otherwise existing with symptoms of consecutive myelitis from inflammation of the spinal cord.

REMARKS ON CHRONIC ARMY DIARRHŒA.

By HENRY N. FISHER, M.D.,

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Chronic Diarrhœa is the most common disease with which the medical staff of the Eckington General Hospital has to deal. The cases vary considerably in degree, and in some minor symptoms, but all have the same general character. Nearly all the patients in this hospital have been sick some weeks or months before coming here; as they are sent from regimental or general hospitals. In almost all instances, the diarrhœa has been contracted while in field service. The general symptoms complained of, are frequent desire to go to stool, and the evacuations are small, thin, and watery, and the discharge is accompanied and followed by a good deal of pain and tenesmus. In some cases the evacuations amount to twenty a day. There is often pain in the back, shooting down the course of the lumbar plexus into the pelvis, dysurea is often complained of, and pain in the lower part of the bladder after the organ is evacuated, and this too when the urine is perfectly normal. Some of the cases have more the character of dysentery than of diarrhœa, but these diseases so often run together that it is hard to draw a distinguishing line between them. In these last mentioned cases there is great tenesmus, heat, and pain about the rectum, and the discharges are extremely fœtid, and mixed with blood. The general color of the stools in the diarrhœa cases is light, sometimes milky in color, and many of these patients are jaundiced. There is besides dry scurfy skin, with a pale waxy complexion, a dry red tongue, and general emaciation and debility. It is not uncommon to have attacks of retching and vomiting, which last a few hours and then subside. The appetite varies. It is generally poor, though sometimes very good. The abdomen is flaccid and generally flat, dull on percussion, and not tender to the touch. But when the diarrhœa lets up, either spontaneously or from the use of medicines, there is sure to be tympanitis, and violent pains in the belly, referred mostly to the region of the transverse colon, and these pains disappear on the recurrence of the alvine discharges.

I will briefly state the results of my observations in the treatment. I have had but very few recent cases under my care. Those I have had, I have treated with a purgative dose of sulph. magnes., followed after its operation by five grs. of Dover's powder, and enjoined complete rest with low diet for a day or two, and these cases mostly get well without further trouble. Almost all our cases, though, are those that have run on for some weeks or even months before coming here. I have tried almost all the recommended remedies for this disease. I have used opium extensively, alone and in combination. I have tried what is called here "Gouley's Pill," got up by one of my predecessors in this hospital. It is composed of opium and ipecac each a grain, acetate of lead two grains, and in many cases I have found the best results; in other cases, it does not succeed at all. I have used also the vegetable astringents, such as catechu, kino, galls, tannin, etc., and have derived benefit occasionally from them. Where the discharges are dark and fœtid, I have found great good from two drops of turpentine in a drachm of mucilage taken several times a day. I have tried the much vaunted effects of ipecac in large and small doses, but I was disappointed. Observing that Dr. Tripler, U.S.A., recommends Fowler's solution, I tried it in a number of cases, and two or three got well on it. I used three drops thrice a day. Two cases which had resisted every treatment got well on nitrate of silver, a quarter grain three times a day. One had a relapse, the other remained well.

Where the cases are of dysenteric type, I have been accustomed to wrap the abdomen in hot flannel, and if there be much tenderness, dry cups are applied over the colon. If the irritability does not prevent the introduction of a pipe, a drachm of laudanum in two oz. of starch, as an enema, generally affords relief. I have promptly relieved irritability of the bowel and bladder by injecting cold water into the gut, sometimes adding a little acetate of lead. I have never used mercurials in chronic diarrhœa.

The great point I conceive to be not so much the particular drugs given, provided important indications are answered, as the general dietetic and hygienic treatment of the patient. The mildest and blandest food, and that in moderate quantity, is given, and I prefer whiskey to all other stimulants when required. I have never found that milk is injurious in these cases, though some high medical authorities are opposed to its use; any greasy or fat food will invariably bring on an exacerbation, or even a relapse.

Of the post-mortem appearances, I have not had much opportunity for observation. In three cases which I examined, the large intestine was inflamed, and the coats of the sigmoid flexure and rectum thickened. I observed no ulceration in any part, though it might reasonably be expected to exist, and doubtless does in many cases.

Medical Education in Rome.—"I shall not easily forget," says M. About in his admirable volume, "La Question Romaine," "the insane laughter which seized me when I entered the anatomical theatre at the Hospital of the Santo Spirito in Rome, and saw the corpse which was being dissected by the students covered with a vine leaf. In that land of chastity, where the bashful vine entwines itself round every branch of science, a young surgeon, an assistant at a hospital, confessed to me that he had never seen a woman's breast. 'We have,' he told me, 'to pass two examinations for the Doctor's degree, one theoretical, the other practical. Between the first and the second we practise at the hospitals, as you see. But the priests, who have the greatest authority over our studies, do not allow a doctor to attend a labor till he has passed his second examination and obtained a license to practise. They are afraid of demoralizing us. We deliver dolls, and in that manner acquire practical experience. In six months I shall have taken all my degrees, I shall practise surgery, and I shall attend as many labors as I like, without ever having seen one.'"—*Lancet.*

Reports of Hospitals.

CASES AT THE NEW YORK EYE INFIRMARY.

By HENRY D. NOYES, M.D.

II. LAGOPHTHALMUS.—III. ECTROPIUM BY SPASM OF ORBICULARIS.

(*Continued from* Vol. V., p. 350.)

II.—*Lagophthalmus.*—Dec. 18, 1861.—Blanche W., æt. 10, born in Kentucky; a light mulatto. When fourteen months old had paralysis of the right side of the face. Almost all the facial muscles have recovered their tone, except the orbicularis. She has some command over it, but cannot completely shut the eyelids. When the lids are open they separate to an unusual extent, making the eye stare, and appear protuberant. The lachrymal secretion is not forced into the canaliculi, and she is annoyed by epiphora. Vision of this eye is not perfect. It is myopic and also amblyopic, the reason being the existence of posterior staphyloma of the sclerotic, as discovered by the ophthalmoscope.

To relieve the epiphora, the inferior canaliculus was slit up, but to no good purpose.

The next proceeding was to shorten the eyelids, and thus narrow the palpebral fissure. This was done by excising a triangle from both upper and lower lids at the outer commissure. The base of each triangle was at the border of the tarsus, the apex vertical. The base reached out a little distance beyond the commissure, towards the temple. The piece was first cut out of the lower lid, and the opposite edges sewed together. The piece from the upper lid was larger; the base of the triangle being about five-eighths of an inch long. Its edges were then united by sutures. Two vertical linear wounds were thus made, and the eyelids drawn tensely over the globe. The lids were closed by isinglass plaster.

Jan. 15th.—The wounds did not close by primary adhesion, but by second intention. There is a little wrinkling in the cicatrices. The lower lid now rises higher, and the upper lid falls lower than before, making the palpebral opening of the same size with that of the other eye. The eyelids can be shut more perfectly, but not yet completely. The epiphora has disappeared.

III.—*Ectropium by Spasm of Orbicularis; Congenital Deformity of Eyelids.*—Jan. 15, 1862.—Eliza R., aged 11 weeks. The mother states that since the time of birth, when the child cries, something comes down over the right eye. She is much alarmed lest this should be something growing over the eye. It is found to be eversion of the upper lid upon forcible contraction of the orbicularis. The lid does not promptly redress itself, but continues everted—and during sleep it is sometimes found in the same malposition. The reason for this inversion is found in the peculiar shape of the eyelids. The tarsal border of the upper lid is disproportionately long; instead of meeting the border of the lower lid it overlaps it when the lids are closed. The palpebral fissures are not horizontal, but turn up at the outer angles. The interval between the inner angles of the two eyes is unusually broad, and there is a trace of the crescentic fold of skin, making the deformity known as encanthus. The inner canthi do not have the regular and well formed horseshoe shape, but are simply acute angles like the external commissures.

The spasmodic eversion occurs in both upper lids, but more frequently in the right. The conjunctival surface is deeply congested, but not granular. The following operation was performed: Child anæsthesiated, a wedge-shaped piece taken out of the upper lid at the outer commissure, the base of the triangle at the tarsal border and its apex reaching up to the conjunctival cul de sac. The external incision ascended nearly to the brow, and the exposed fibres of the orbicularis were divided, the wound united by two sutures, and the lids closed by isinglass plaster. On the third day removed the plasters, wound united by adhesion, but stretched open a little by the loosening of one suture; another suture put in.

Feb. 3.—Wound firmly closed; at the tarsal border there is a slight nick to show the point of junction. Since the operation eversion of the lid has occurred a few times, but it returns readily to its place. The appearance of the palpebral fissure is much more natural than before.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, Sept. 10, 1862.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

(*Concluded from* vol. v., p. 341.)

MORBUS COXARIUS.

Dr. Krackowizer presented two specimens of hip-joint disease, and remarked upon them as follows:—During the recess of this Society (from June 25), I was obliged in two instances to resort to resection of the hip-joint in children for morbus coxarius. One child died; the other one is living, with every prospect of ultimate recovery. The child (a girl) that died, did not die in consequence of the operation, but from an inherent tendency to tubercles, which developed themselves subsequently in the brain. The little patient, at the time of death, was three years and seven months old. I must premise by saying that all the children in this family are more or less tainted with scrofula. One child died a couple of years ago of tubercular meningitis while suffering from spinal disease. The child with morbus coxarius was also delicate and sickly, and had suffered from severe broncho-pneumonia when about ten or twelve months of age. In June of last year all the children in the family suffered from diphtheria, and this one took a pretty long time to recover from its effects. It was then noticed, when the child was able to leave the bed, that it used the right leg less than the left. He was sent to me at once, and I made a very careful examination to assure myself whether there was incipient paralysis or commencing coxitis. I could come to no positive conclusion at that time, and advising quiet, asked to see the child again at the end of a couple of weeks. At the second examination, I made out the existence of coxitis, and resorted at once to the plan of treatment mainly introduced by Dr. Davis. The symptoms did not make any progress while the child was under this treatment—in fact, there was some improvement. Small as the child was, and little the purchase which I could gain for the apparatus, I nevertheless gave him the benefit of moving about. The apparatus was applied September 4th. The child would move about with the assistance of his parents, with a very slight limp. Having instructed the parents in the use of the apparatus, I saw the child only occasionally. I visited the patient again on the 29th of September, when I found that the symptoms of inflammation had increased in consequence of the plaster loosening its hold upon the skin, and the amount of extension having been in consequence decreased. I caused the child to be brought to bed again, where it remained for most of the time until I was obliged to resort to the operation. After a few months the child was permitted the use of the apparatus again, not however with a view to active locomotion, but only to be kept out of bed and in the open air. I found that by November 14th the thigh could not be flexed more than an angle of forty-five degrees, and adducted over the other limb more than twelve or fifteen degrees. About that time the child commenced to be feverish and restless, and at night to have symptoms of night sweats, yet he never showed that characteristic symptom of progressive disease of the joint —those loud shrieks which children give when suffering from this inflammation, and when the elastic extension is not employed. In the examination during the spring of the present year an abscess formed on the anterior aspect of the thigh. The child was then subjected to anæsthesia, and a thorough examination of the parts was made. I then plainly discovered crepitus, and told the parents that in my opinion there was nothing else to be done but to cut down upon the parts and remove the dead bone. They did not consent to the measure, and I opened the abscess, which continued to discharge moderately. When the milder season advanced I had a carriage made, to the foot of which was rigged an apparatus that extension might be kept up while he was taking the air. The child, however, gradually gave way under the exhausting influences of the suppuration and disease of the joint, and the parents finally concluded to have the operation performed. This was done on the 7th of July last. The head and larger part of the neck of the bone were completely absorbed. The acetabulum was, like the remnant of the neck, worm-eaten and spongy, giving the characteristic appearance of carious bone. The diseased portions of the acetabulum and the adjacent parts were removed and gouged out by Luer's gnawing forceps until healthy bone structure showed itself. The loss of substance of the acetabulum was such that by passing the finger of one hand into the rectum and the other into the wound, there was a space equal in breadth to the ends of two fingers where no bony matter was left. All that separated my two fingers was the peritoneum, fascia pelvis, and periosteum. The wound was closed as usual with sutures and the elastic extension, so as to steady the limb, which had lost its hold upon the pelvis save by the psoas and iliacus muscles. The first couple of days the child was very much exhausted, but rallied so that by the fifth day a crutch was placed under his arm and he was sent into the street. From that time he rallied very rapidly; the suppuration became less, the granulations very fine, his appetite returned, and there was no fever. He continued to improve until about a fortnight after the operation, when there was just as much suppuration as the cut would secrete, and in front of the thigh where the abscess had been open before there was a small oozing glairy limpid liquid which came from the resected joint. It being very hot about the close of July, the child commenced to fail with his appetite, and diarrhœa supervened. He became very thirsty, and slept less yet. Withal he would keep a nice appearance, the suppuration being very slight. The child had commenced before to use the limb a little, and to make slight flexions and extensions without giving rise to pain or crepitus. When these bad symptoms showed themselves the child emaciated very rapidly, vomiting became a constant feature, he commenced to talk strangely, and there were spasmodic contractions of the body—in a word, the symptoms of tubercular meningitis developed themselves, and the child died.

I made the post-mortem examination on the following day. On opening the head it was noticed that the anfractuosities were somewhat flattened, that there was a very exuberant formation of tubercles in the folds of the pia mater on the left hemisphere, none at all on the right hemisphere or at the base. The ventricles of the brain were distended by an ounce or two of serum; the fornix was so much macerated that it broke away like cream, but the membrane covering the corpus striatum, and optic thalamus was not modified at all. I must add that about the last ten or twelve days he would sometimes have a short hacking cough, terminated occasionally by vomiting, but there was no expectoration, nor anything wrong by auscultation or percussion. The left lung was normal and anæmic, while the right lung was studded with recent miliary tubercles. I brought the lung along, not with a view of demonstrating miliary tubercles (which are more to be felt here than seen), but I desire to exhibit a condition of things which we sometimes meet with, and which is easily put down as tubercles—I mean cirrhosis of the middle lobe. This condition of things exists in the right lung. I mentioned that the patient had broncho-pneumonia when but a year old, and I have no doubt that hepatization of the lung was not observed, and that fibrinous exudation and subsequent obliteration of the tissue of the lobe was the consequence, bringing it to that condition which precedes dilatation. The liver had a somewhat unusual appearance, but it was pale, of a sort of yellowish hue, and marked with marble spots of a somewhat darker hue. It was not merely the color which produced these marble-like appearances, but depressions upon the surface of the organ of an arborescent character. On cutting into the substance of the organ it will be seen that the tissue of the vena porta is puckered and recedes from the surface. The tissue of the liver being scraped, deposited a layer of fat upon the knife. Under the microscope the cells were normal, but were filled with a good deal of oily substance; and of cells containing a nucleus and nucleolus—portion of the specimen taken from the ramification of the vena porta showed exuberant formation of new fibrinous tissue. In this specimen we have an instance of fatty degeneration of the liver concurring with the commencement of fibrinous inflammation. This, as is known, is a rare circumstance. The kidneys were perfectly healthy. The mucous membrane of the intestine was pale, but nowhere was there any ulceration to be seen.

The most interesting part, of course, is the condition of the pelvic bones and of the thigh. The pelvic bone of the right side was removed entire, with part of the thigh bone attached. There was a small opening just where the gluteus muscle attaches itself to the outer surface of the thigh bone, which allowed a small probe to come into a large cavity, and which nowhere struck rough bone. On cutting longitudinally through the gluteus muscle it was found pale and transformed into an adipose or fibrinous tissue. It will be seen that the cavity from which the diseased bone was gouged out is filled with a sort of pyogenic membrane which had secreted that limpid serum drained by the sinus on the anterior aspect of the thigh. The upper part of the femur was rounded and covered with the same substance. The periosteum, which I had peeled from the larger trochanter, had adjusted itself to the resected surface of the thigh bone, and had thrown out a more or less considerable quantity of osteophites. On turning this specimen so that the inner surface of the pelvis appears, and removing the obturator muscle and scraping off the periosteum it will be seen that this membrane had thrown over a considerable quantity of bony material in irregular masses, whereby the opening which had been made in the acetabulum had been so much decreased that barely a moderate sized goose-quill could be introduced. I have no doubt that if this tubercular disease of the brain had not supervened the child would have had a very fair chance to recover with a pretty useful limb.

FOREIGN CORRESPONDENCE.

LETTER XIX.

By PROF. CHARLES A. LEE.

CRETINISM.

Interlaken, Switzerland, Sept. 4, 1862.

There are, perhaps, no physicians of the present age, who have been in the habit of perusing medical journals, who have not became more or less acquainted with the institution of Dr. Guggenbuhl on the Abendberg, for the cure of cretins and idiots. It was opened on the 23d of July, 1841, and has now been over twenty-one years established, during all which time Dr. G. has presided over, and directed its operations. As it was one of the first, if not the very first institution of the kind ever established, it naturally attracted much attention, and it is but truth to say that it has not only given rise to many publications on the subject, but it has also been the germ of several establishments of the same kind, in different parts of Europe. For a long series of years the usefulness and integrity of Dr. G. were not questioned by any one; it was visited, and still continues to be, by physicians, clergymen, scientific men, of every country, and even by kings and princes, who awarded to Dr. G. great credit for his zeal, benevolence, and disinterestedness. But of late, within the last four or five years, the doctor has had to encounter very serious opposition; his candor and honesty have been even questioned; he has been repeatedly charged with falsehood, selfishness, and an avaricious disposition; and recently these charges have been endorsed by medical societies in Switzerland, as of Berne, which have passed resolutions, cautioning the public against Dr. G. as guilty of intentional deception, and engaged only in a money speculation, entirely regardless of the true interests of the poor cretins, in whose cause he has labored all his life, and for whose benefit he has sacrificed all the pleasures and advantages of civilization and refinement.

Influenced by these and other considerations, I determined to visit and examine the institution for myself, to determine, if possible, whether there was any truth in these charges. I accordingly set out this morning from Interlaken with a horse and guide, and after ascending a very steep mountain, along a mule path, for two hours and a half through a dense forest of larch, fir, and beech, we at length reached the establishment, perched on a plateau almost on the top of the Abendberg, commanding one of the finest views in all Switzerland. Twelve hundred feet below you lies the beautiful valley and village of Interlaken, with the Lakes of Thun and Brientz; while on the opposite side we have some of the loftiest snow-clad mountains of the Oberland rising majestically before us, as the Eigher, Monch, and Jungfrau. A more lonely spot cannot be found among the Alps. The main building is an irregular built chalet, part wood and part stone and stucco work, of two stories and basement, with eighteen rooms, and wing recently erected and fitted up as a chapel, with two windows of stained glass. The house is very plainly and even roughly built, with no pretensions to taste or elegance, and furnished in the most simple manner. The reception room is of moderate size, and contains, suspended to its walls, twenty diplomas and certificates of membership of different medical societies in various countries, and among the rest of our own *Academy of Medicine*, to which is appended the name of John W. Francis, President. The register contains the names of many distinguished men from America and every country in Europe. Dr. A. B. Stout, of New York, was the first American who visited the institution, in July, 1844. Sending in my card, it was nearly half an hour before the Doctor made his appearance. He is a man a little above 40, small in stature, of a highly benevolent expression of countenance, sprightly, very intelligent, and speaks the English language remarkably well. He received me very kindly, and answered most fully and satisfactorily every question I asked. There was evidently no concealment, nor any attempt at deception. I will embody the substance of Dr. G.'s remarks in a continuous form, to save space, recollecting that they were in reply to queries which I made:—"We now number," said the Doctor, "about 30 patients, 20 in the house and 10 out; we have some, perhaps one half, who are only half cretins; some labor under scrofula and other diseases; many are now out on the mountain, attending to our cows and goats. We have six hundred acres of land belonging to the establishment, part of which is tilled, but most is pasture land; the soil is not very good, but we raise some wheat and vegetables enough for the establishment, besides an abundance of milk, butter, and cheese. I do not give the cretins potatoes, as they are too bulky, and cretins have already enormous stomachs; they are kept almost altogether on animal food, as meat and milk, some rice and bread. The meat is always hashed up for them, as some of them have difficulty in masticating. I find that a nutritious diet of animal food is absolutely indispensable; it is the most important of all curative measures. We first aim to invigorate the body, and give, besides the most nourishing food, preparations of iodine and iron, especially the syrup of iodide of iron. The milk of our goats and cows is very medicinal, as they feed on many aromatic and medicinal plants. It also contains more oil and caseine than the milk of animals kept in the valleys.

We use phosphate of lime and cod-liver oil, with frictions and aromatic baths. In cases of great muscular relaxation and want of capillary circulation, we use electro-magnetism, sometimes while in the bath, and sometimes it is applied in a moderate degree to the brain, and continued for a considerable period. I attach great importance also to the climate of this high mountain; we enjoy a pure bracing air, never stagnant, as in the valleys below, largely supplied with oxygen and ozone, highly rarified, and altogether exhilarating in its effects on the system. We have an abundance of light and sunshine, for the sun shines here almost every day, while the valleys below are enshrouded in mists, and vapors, and clouds. In short, I attribute much of my success in the cure of *cretinism* to the climatic influences of this pure, fresh mountain air; and though it is very difficult to get here, and everything has to be brought on the back of mules, yet these advantages of climate more than counterbalance all the inconveniences of difficult access. We have no epidemics up here, while at Interlaken and all the villages in the valleys, they have some epidemic almost every season, as hooping-cough, scarlet fever, etc. It is never very cold here in winter; we are thoroughly protected against cold northerly winds; we have a southerly exposure, as you see, and our average temperature in winter is 10 degrees of Reaumer. The highest temperature ever experienced here in summer, has been 24 degrees of Reaumer; to-day it is about 12. In the valley to-day, the heat is no doubt very great, and the air stagnant and sultry, with a high dew point; here it is cool and invigorating. No malaria ever reaches here; the air is highly charged with positive electricity; in consequence, the blood is more freely and thoroughly oxygenated; the oxygen is more readily absorbed. The result is, more vigorous digestion; the appetite always improves rapidly here, and that is a most important element in the cure of cretins. We have about ninety individuals connected in some capacity with our institution at the present time. It is supported mainly by what we raise from the land; we get some donations from abroad; the Swiss people do nothing for us, as they have a prejudice against doing anything for cretins, as they look on them as *holy beings*, incapable of sin, and rather a blessing to a family than otherwise.

"Cretinism differs from idiocy, inasmuch as it is a disease. The cretin is, so to speak, a perfect being, whose physical development is prevented by the bad conditions in which it is born, and in which it lives. Its moral and intellectual life is paralysed, because its physical organs are without strength or vital force. The idiot, on the contrary, is an incomplete or imperfect being, in whom some portions of the brain are wanting, or remain in a rudimentary state. The physical development is not in proportion to the feebleness of its intelligence; we often see vigorous idiots, well developed, in good health, and possessing great muscular strength. This distinction, however, is not always well marked. Cretinism is a grave affection of the cerebro-spinal system, consisting in several pathological alterations which give rise to irregular development, check the bodily growth, and blunt and impair the senses and intellectual faculties. Autopsy has often revealed to me cerebral œdema with much water in the lateral ventricles. At a more advanced period, there is softening of the adjacent portions of the circumvolutions. Microscopic inspection, in numerous cases, discloses no other visible change either in the white or grey portions of the brain, or in the elementary fibres. These pathological conditions often check the development of certain parts of the brain, especially the anterior and posterior lobes; sometimes they cause general autopsy of the brain; more rarely hypertrophy of this organ is the cause of the cerebral stupor. We sometimes meet with hardening of the brain, or some portions of it, in exceptional cases. Hypertrophy of the cranial bones, compressing the cerebral substance, characterizes the rachitic form of cretinism in its more advanced stages. The premature closing of the cranial sutures by inflammation, very often causes deformity in the shape of the head, both in cretins and idiots; but as I have often found the same thing in persons perfectly intelligent, I do not think it can be regarded as one of the pathological causes of cretinism. Indeed, the word *cretinism* is a collective name, expressing different pathological states, with a tendency to progressive degeneration and feebleness of the intellectual faculties. Observation in our Alpine valleys has enabled me to distinguish a group of precursory symptoms, which afflict a large proportion of the inhabitants without affecting perceptibly their intellect. These are goitre, stunted growth, a disproportion between the body and its membranes, feebleness of the senses, and especially dulness of hearing and strabismus.

"The pathognomonic symptom of cretinism is *cerebral stupor;* but this does not prevent certain isolated faculties from being developed in an extraordinary manner, as a memory for acquiring languages, musical talent, and drawing, all of which have been exhibited in our institution. Fallere and others supposed cretinism to be always hereditary, but this is not the case; the phenomenon is often toral or sporadic; we have had no cases where neither parent was affected; the germ or predisposition is doubtless derived from the mother, for we often find one or more cretins in a family of children, while all the rest are unaffected, and yet all are surrounded by the same influences. The closest observation for some time after birth, often fails to detect the marks of cretinism, except it be feebleness, for the child is well formed; and it is very evident, therefore, that in a great proportion of the cases, at least, it must be the pernicious action of local causes which develops cretinism during the first three years of life; generally, about the period of the first dentition, with symptoms of softening of the bones, of hydrocephalus, scrofula, or general atrophy. Idiotism is much less curable than cretinism, although idiots are ordinarily well formed, strong, and robust: in these respects they differ from cretins, who labor under great muscular debility, and other symptoms of disease.

"You know," continued Dr. G., "that a great many causes have been assigned for cretinism; some say it is a want of iodine; some, it is owing to too much magnesia in the water; others, too much lime; some insist that is always hereditary, etc. My opinion is, that the chief cause is *malaria*. This may be aided by poverty and filth, but the latter never produce it alone, else it would, for instance, be very common in Ireland. There are over ten thousand cretins in Switzerland, and hundreds of thousands of goitre. Napoleon ascertained that in 1811, there were 3000 cretins in the Valais alone; 7000 have been enumerated on the Southern or Italian slopes of the Alps; there are 5000 in the mountains of Suabia. There are large numbers in Russia; and in fact, in all the mountainous regions of Europe: so that, although full statistics have not yet been taken in every country, there is good reason to believe that there are over 100,000 cretins in Europe.

"In regard to treatment, the fundamental principle is to strengthen the physical development, before we undertake to invigorate the senses or the intellect, because experience has proved that such experiments are hazardous, until the vital forces are strengthened, and nutrition and the functions of the nervous system regulated. For this purpose I employ the means already mentioned, as epid aromatic baths, frictions, cod-liver oil, syrup of iodide of iron, electricity, etc., a nourishing diet, much exercise in the mountain air, which both regulates nutrition and hematosis."

The above comprises the substance of Dr. G.'s remark- before taking me over the establishment. He first conducted me up-stairs to a spacious room fitted up with objects, plates, and all the necessary apparatus for the instruction of idiots. Here were five pupils and three instructors, a lad of 17 or 18, a young girl of 10 or 12, and a female, somewhat deformed, about 30 to 40. One of the pupils had scrofulous sores on the neck, but was not a cretin; one was an idiot, laboring under chorea; and three were apparently cretins. One was teaching the alphabet, another to count on strings of beads, the third was endeavoring to learn how to distinguish colors. One, who had been a year or more in the institution, could just breathe, but with great difficulty. The other cretins, Dr. B. said, were out taking care of the flocks. The Dr. said he had not kept statistics, as he had been away a good deal; and besides it was difficult to keep patients long enough to make a fair trial; but that he probably had had altogether 100 in the establishment long enough to test his mode of management, and he was satisfied that the disease was in most cases, if taken early, quite curable; if taken later, so far curable that patients would be taught to dress and undress, feed themselves, do many kinds of work, especially agricultural, of which he spoke enthusiastically. As a means of cure, one boy, whose photograph he showed me, when he came to the institution could speak but a single word, and was quite unable to take care of himself; after staying a few years he became sufficiently master of three languages, that he went out as a teacher, and is now engaged in New York in that capacity. I saw a well written letter of his in French; his name is Frederick Mayer. The Doctor stated that, if a cretin woman have a child whose father is not a cretin, the child is never a cretin, taking after the father; and that in his opinion, *mind and intellect are always transmitted by the father, never by the mother.* He mentioned a family of mathematicians in Basle, who were distinguished for mathematical talent for several generations, although the mothers, in several instances, were weak-minded females; he also mentioned the Munroe family in Edinburgh, as cases in point. He said that Schiller, Hufeland, and other distinguished literary men, had feeble-minded children, because their brains were overworked, and their nervous energies exhausted by study. The Doctor also showed me several casts of cretin heads, which certainly did not sustain his theory of good development. Some resembled the heads of the Carib Indians, flattened and greatly elongated; some were hydrocephalic (one contained 18 lbs. of water after death, age 22), still the faculties were tolerably good to the last; some resembled the negro type; and not one was symmetrical or well developed. I may remark that in every cretin I have examined, I have found the capillary circulation very sluggish, the skin cool and clammy, and of a blue color, the pulse slow, feeble, and languid, and every function torpid.

After showing me photographs of all the remarkable cases, in which he has met with much success, and related their histories, he presented me copies of his various publications on cretinism, and showed me over the building and grounds; the Doctor then accompanied me some distance down the mountain, and bade me adieu.

After such attentions, it certainly would be very ungracious and ungrateful for me to criticize Dr. G. very severely, or pretend to sit in judgment on the various charges brought against him. I will, however, add, that I have carefully read all I have seen alleged, and doubt very much whether the charges ought to have quite as much weight as some suppose. The institution is evidently run down, and is not what it once was; there is not an adequate corps of teachers; the Doctor is absent some weeks during every year, for which I can hardly blame him, considering his twenty years of isolation on the top of that lonely mountain. He solicits donations from the benevolent and the wealthy, which he has a good right to do, if the funds are honestly appropriated, which can hardly be doubted. There is certainly room for great abuses, where an institution is managed in the way Dr. G.'s is; but his past history, the entire devotion of his life to this one purpose, of proving the curability of cretinism, and that under circumstances of a disagreeable nature, requiring great personal sacrifices, and not a few hardships and trials—all this ought to furnish a satisfactory guarantee that his motives are good, and his intentions and purposes honest and laudable. That he is an enthusiast, is true, and his statements, perhaps, must sometimes be taken with some allowance, as they always must in such cases; but that there is intentional deception, I cannot believe. If we can ever judge from appearances, I should say that Dr. G. is a humane, benevolent, candid, honest, Christian gentleman; and I believe his name will go down to posterity as a true benefactor of the race, and a sincere friend of humanity.

American Medical Times.

SATURDAY, JANUARY 3, 1863.

SPECIAL INSPECTION OF HOSPITALS.

It was truly remarked by the Surgeon-General that, to secure efficient hospital management, there should be an almost daily inspection by competent persons. The inevitable tendency of officers and attendants in hospitals is to laxity of discipline and negligence in the performance of even the most ordinary routine of duties. It is eminently true, that, "if you give them an ell they will take a yard." The first oversight of a violation of rules leads to the commitment of several similar errors. Cleanliness, a primal virtue in every hospital, is generally the first rule overlooked. From the parent sin proceed a thousand errors, one following the other so imperceptibly that the entire establishment soon becomes a scene of disorder, of which many a medical officer is entirely unconscious, until, by some pointed criticism, his eyes are opened to the true condition of his hospital. Herein lie the importance and value of hospital inspection by experts in hospital management.

Acting upon the suggestion of the Surgeon-General, the Sanitary Commission, with its usual promptness, organized a department of special inspection of the General Hospitals of the army—the inspectors to be chosen from civil life. As the head of this bureau Dr. Henry G. Clark, of Boston, was selected. Dr. Clark has special qualifications for the position, having devoted much of his life to the study and practice of sanitary science, and to no one could the organization of the department have been more wisely intrusted. This special inspection has now been carried on three months, and with satisfactory results.

The first report of the Inspector-in-Chief, issued Nov. 18, gives us some insight into the operations of this department. The Commission were led to their action by the following considerations:—

> "With the large increase of the army, its sick and wounded were constantly growing in number, and the hospitals provided for them already exceed one hundred. While the strength of the army had been nearly doubled, and the population of the General Hospitals more than quadrupled, the Staff of the Medical Inspection had not been at all augmented. Under these circumstances it was obvious that intelligent assistance from civil life would be acceptable. This aid the Commission resolved to seek amongst the best and ablest members of the medical profession, soliciting, for short periods, the services of men unable to leave their responsible duties for any length of time, and yet ready to help the national cause and that of humanity."

Circulars, setting forth the nature of the duties, were issued to more than a hundred medical gentlemen of assured position in the loyal States, and more than two-thirds accepted the service. Upon commencing a tour of inspection each inspector receives printed instructions, embracing in detail the points of special observation.

He is directed to report as to the locality of the hospital; character of its site; style of building; number of assistant medical officers; number of hospital stewards, ward-masters, male and female nurses; estimate character and efficiency of all the officers of the hospital; number of patients in hospital; general character and degree of gravity of cases under treatment; the degree of medical and surgical skill of medical officers, and the humanity and kindness evinced by them, and also by the nurses; at what hours the regular visits are made to the sick; how often the surgeon in charge visits the wards; rate of mortality; success of surgical operations; is diet sufficient in quantity, and good in quality; is the hospital fund sufficient to secure an ample supply of delicacies and necessaries for the sick; are stimulants of good quality, and judiciously administered; is strict cleanliness of floors, bedsteads, bedding, clothing, vessels used for food, spittoons, bed-pans, sinks, and water-closets, kitchen, and cooking utensils; the water supply for washing, bathing, water-closets, and in case of fire; provisions against fire; means for lighting and heating the wards; the drainage; cleanliness of grounds around the hospital buildings and tents; the air-space allowed for each patient; character of continued fever and dysentery; prevalence of erysipelas, hospital gangrene, and pyæmia; use of deodorizing agents; supply of laundresses and means of washing clothing and bedding; supply of mattresses, bed-sacks, straw, blankets, sheets, and mosquito bars; supply of clothing, shirts, drawers, socks, and slippers for the patients, etc., etc.

It will be seen that this inquiry covers the whole ground of hospital management. These reports are of a confidential character, and after being transmitted to the Inspector-in-Chief are to be furnished in abstract to the Surgeon-General. During his tour of investigation the inspector is acting also under the authority of the Surgeon-General. He can therefore give to his examination as much thoroughness as he chooses, as all officers of hospitals are required to facilitate his investigations.

Evidently, there can be but one cause of failure in this system of inspection; and that will arise from incompetency of the inspectors themselves. It was remarked by one of the most experienced and sagacious members of the Commission, that there were not more than twenty medical men in the loyal States *thoroughly* qualified for this duty, of these not more than ten were available, and of the latter the services of not more than five could be secured. This high estimate of the qualifications necessary to discharge the duties of an inspector efficiently, will generally be regarded as greatly exaggerated. But to those practically familiar with hospital administration, its endless details of duties, and the constant tendency in every department to waste, untidiness, and disorder, the remark will be considered as the suggestion of a mind which thoroughly appreciates the subject. For our own part we believe he rather under than over estimated the importance of this office. An inspector should have a natural aptitude as well as a special education for this service. He should have, as ruling traits in his own character, a love of order, neatness, prompt dispatch of business, and to this should be added a thorough knowledge of all the details in hospital government. Thus qualified the inspector surely detects errors, whether they are patent or concealed. His inquiries are all pertinent, and truth as well as error is readily revealed. Nothing is more easy than for a visitor to be deceived as to the real condition and management of a hospital. If the inspector accept the always proffered leadership of the surgeon, he will saunter through the wards in the afternoon, when the patients are absent and their beds carefully made, look in at the open doors of the kitchen and laundry at times when no work is in progress, inquire as to the condition of the bath-room, the sink, and water-closet, read a printed diet table conspicuously posted; and then retiring, write a complimentary report of the hospital, and especially of the medical officers! Far different would have been his opinion, even though a superficial observer, had he *personally* examined each bed, the kitchen and laundry, the bath-room and sinks, inquired of the cook or patients as to the daily food served—in a word, had he personally inspected the hospital according to the instructions above given.

We learn from the report that the inspection is already bearing good fruit; that there is "a very marked and progressive improvement in the condition of the hospitals inspected." There can be no doubt that this department of the Commission is to become a most useful adjunct to the Bureau of Sanitary Inspection of the army, and we shall anticipate with interest its future reports.

THE WEEK.

From a recent report of the Sanitary Commission we learn that an "Army Medical Society" has been established at Washington. Its origin and objects are thus stated:—

> "The Army Medical Society owes its origin to the far-sighted and thoughtful suggestiveness of the General Secretary, who, at an early day, invited the Surgeon-General and the other surgeons on duty in the District, to meet the members of the Commission, at these rooms, for friendly conference upon the matters of common interest connected with the administration of the General Hospitals. The meetings have been fully attended, and the result has been the formation of a permanent society, which, with a very simple organization, takes cognisance of all matters relating to the hygiene, the administration of military hospitals, and the care of their inmates. The active members comprise the Surgical Staff within the District, and some of the officers of the Commission; but it affiliates to itself, *as associates, all the Surgeons of the Army and Navy*, and all the *Medical* members of the Commission, inviting them all to contribute to its stores of knowledge, and inviting them to partake freely of its benefits."

The Surgeon-General, as appears in another column, has decided to require of all candidates for appointment to the medical staff of the regular army, that they shall have attended at least one course of lectures on hygiene and military surgery. In order to afford the requisite facilities, he advises the different medical colleges to create this professorship. Several schools have already instituted chairs of military surgery, and the remainder will now doubtless do likewise. This arrangement may, in some measure, answer the emergency that now exists for a more thorough and special preparation of those about to enter the Medical Staff of the army. But single professorships will not supply the place of a well appointed Army Medical School, so located as to furnish the student thorough clinical and other advantages.

Reviews.

Dentition and its Derangements. A Course of Lectures delivered in the New York Medical College. By A. Jacobi, M.D., Prof. of Infantile Pathology and Therapeutics. New York: Baillière Bros., 440 Broadway.

These lectures have been written by a gentleman who has brought no ordinary qualifications to the task. Each one bears the stamp of a conscientious effort to present with the utmost brevity the greatest amount of information, as a basis for the best clinical suggestions. A vast range of reading, practical familiarity with morbid anatomy, and the most recent inspirations of physiology, with habits of patient clinical observation, are interwoven with every line of the text. That our author's views may not meet the approval of those practitioners who are disqualified by education or habit for the practice of such differential diagnosis as is inculcated in every one of these lectures, need not be a matter of surprise, while we are confident that the work will be valued by those who are grateful for every opportunity of rising above routine, or reading the result of an expert's patient, thoughtful study. There is so much of value in this unpretending little volume as to forbid its review within the limits of this Journal, and there are so many topics touched but incidentally, as to lead us to hope that the present edition may but prove the syllabus for that complete work on Infantile Pathology for which Dr. Jacobi has so thoroughly proved his fitness. G. T. E.

The Institutes of Medicine. By Martyn Paine, A.M., M.D., LL.D. Seventh Edition. New York: Harper and Brothers. 1862.

Within the short space of fifteen years the Institutes of Dr. Paine has passed through seven editions. And yet as a whole, and in detail, it is diametrically opposed to the modern school of physiology, pathology, and therapeutics. This fact indicates both the intrinsic merit of the work and the liberal character of the profession.

Correspondence.

MEDICAL MATTERS IN BERLIN.

[To the Editor of the American Medical Times.]

Sir:—Have you room for a few words from a student of our science in this great medical capital? There is much to interest and employ us here, and I am finding the time usefully spent. The New York medical public is tolerably familiar with the book on Diseases of the Ear, by Dr. Kramer, which was republished in Philadelphia about the year 1830. Since then the Doctor has greatly increased his experience, in seeing a vast number of cases. He has no public clinic, but I have been permitted to see many of his cases, as presented in his rooms, during the last two months and a half, and they have been of great interest. The Doctor makes three divisions in his cases—Diseases of the External, Middle, and Internal Ear, respectively. He takes issue with Toynbee and Wilde, and classifies the greater number of cases as belonging to the second variety. Indeed his eustachian catheters, ranging in numbers from one to five, beginning with a tube the diameter of a very slender pin, are his great vehicles of cure. He has discarded his former plan of injecting air into the cavity of the tympanum by means of the pump, and does it altogether by the mouth. With regard to diseases of the internal ear, he claims that scarcely anything is known. He has the peculiar idea that diseases of the ear are entirely *local*, and uses no *constitutional* remedies, blaming Wilde and others very severely for the use of mercury, blisters, etc. This is in direct variance with all my teachings, and with the practice from which I have seen excellent results. Dr. Kramer uses oil upon the membranum tympani, very weak solutions of zinc, in no case of lead, injects air, and mild astringent solutions into the middle ear. The time I have been here does not of course allow any fair judgment as to the results of his treatment.

The Eye Clinic of Professor Graefe is a place naturally of great interest to the student, the facilities for Instruction being great. The building is not as fine as our Eye Infirmary, nor is the number of patients as large, yet from the nature of things, of which I may speak later, the student fares better than with us. I may say, however, that the general practice, in ordinary cases, does not commend itself to me, as that at the Eye Clinic in New York.

The Charity Hospital, having about two thousand beds, is a noble Institution. The treatment of fractures seems to me better attended to in the New York Hospital, Bellevue, and St. Luke's. Plaster of Paris is very extensively used. The measurements after union of fractures of thigh, are very loose in method. The pathological rooms of Virchow are connected with this hospital, and are extensive to a degree a New York student can hardly conceive. The thoroughness and comprehensiveness of post-mortems are wonderful. The interest correspondingly great. Virchow, besides his reputation as a Pathologist, has one as a Statesman, being a vigorous opponent of the Government in the Prussian Parliament.

Professor Langenbeck, the great surgeon of Berlin, holds a daily clinic. The building has room for about one hundred patients, and many come from the country to be operated on by him. His lectures on surgery are also delivered here. His collection of instruments, with which he illustrates his lectures, is very large, embracing the new and old from every land. The number of medical students here, during the winter session, is estimated at from 500 to [illegible]00. Of Berlin, its medical men and institutions, I may speak again.

Yours, etc.,
D. B. St. John Roosa, M.D.

Berlin, October, 1862.

Army Medical Intelligence.

Assistant Surgeon-General's Office,
St. Louis, Mo., Dec. 6, 1862.

In conformity with the views of the Medical Inspector-General, U.S.A., the following assignment of Medical Inspectors is made to the Military Departments in the Medical Department of the West:

Lieut. Colonel C. C. Keeney, U.S.A., District No 1. The Department of the Missouri.

Lieut. Colonel George H. Lyman, U.S.A., District No. 2. The Department of the Cumberland.

Lieut. Colonel George T. Allen, U.S.A., District No. 3. The Department of the Tennessee.

Lieut. Colonel Lewis Humphreys, U.S.A., District No. 4. The Department of the Ohio and Northwest, and all Hospitals not otherwise provided for.

The limits of the Department assigned to Lieut. Colonel Keeney are defined by General Orders No. 135, current series, and include the States of Missouri, Arkansas, Kansas, and the bordering Indian Territory. Alton, Illinois, is attached to this Department. General Orders No. 155, current series, adds the Territories of Colorado and Nebraska. Lieut. Colonel Keeney will inspect this District at least once each month in accordance with instructions already given him. His station when not on inspection duty will be St. Louis, Mo.

The limits of the Department assigned to Lieut. Colonel Lyman are defined in General Orders No 168, current series, and include Tennessee, east of the Tennessee river, and such parts of Northern Alabama and Georgia as may be taken possession of by the United States troops. His station when not on inspection duty will be Nashville, Tennessee.

It is specially designed that Lieut. Colonel Lyman shall have charge of the sanitary condition of the Army of General Rosecrans. He will, however, visit each hospital and camp in his district at least once each month in conformity with instructions already given him.

The limits of the Department assigned to Colonel Allen are defined by General Orders No. 159, current series, and include Cairo, Fort Henry, Fort Donelson, Northern Mississippi, and the portions of Tennessee and Kentucky west of the Tennessee river. The location of Lieut. Colonel Allen when not on inspection duty will be at Jackson, Tennessee. He is designed to have special charge of the sanitary condition of the Army of General Grant, and will also visit each camp and hospital in the Department at least once each month in conformity with instructions already given him.

The Departments assigned to Lieut. Colonel Humphreys are defined by General Orders No. 112, current series, and comprise the States of Ohio, Michigan, Indiana, Illinois, Kentucky east of the Tennessee river including Cumberland Gap, constituting the Department of the Ohio, and by General Order No. 128, current series, the States of Wisconsin, Iowa, Minnesota, and the Territory of Dacotah, constituting the Department of the Northwest. The Head-Quarters of Lieut. Colonel Humphreys when not on inspection duty will be Louisville, Ky. He will inspect each camp and hospital in his district at least once in each month in conformity with the instructions herewith inclosed.

The changes of Districts herewith announced, will take effect on the 1st of January, 1863.

R. C. Wood,
Assist. Surgeon-General.

The letter given below has been sent to the Dean of the Faculty of some of the Medical Colleges, and it being impracticable to send it to all, their attention is called to it.

Surgeon-General's Office,
December 22, 1862

Sir:—It has been determined to require from candidates entering the medical staff of the army, that they shall have attended at least one course of lectures on hygiene and military surgery.

Information is already received at this office that more than one medical school has determined to establish a chair for the teaching of the above branches, and your particular attention is invited to the propriety of adding to the faculty of your school a professor of hygiene and military surgery.

In this manner, not only will the general education of candidates for graduation be advanced, but the U. S. Army Medical Service will be the gainer in having more competent men present themselves for admission.

Very respectfully, your obt. servant,

William A. Hammond, *Surgeon-General.*

ORDERS, CHANGES, ETC.

Surgeon George Bex, U. S. Vols., has been assigned to duty in charge of the General Hospital, West's Buildings, Baltimore, Md.

Act. Assist. Surgeon T. R. Dunglison. U.S.A., has been ordered to report for duty to the Medical Director at Washington, D. C.

By General Orders, No. 211, current series, from the Adjutant General's Office, the following named has been dismissed from the service of the United States, for receiving money from soldiers, in consideration of giving them certificates of disability for discharge.

Surgeon Ferris Jacobs, U. S. Vols.

Asst. Surg. D. W. C. Peters, U.S.A., has relieved Asst. Surgeon A. Woodhull, U.S A., in charge of General Hospital, Stewart's Mansion, Baltimore, Md. Dr. Woodhull has reported for duty in the Office of the Medical Director in the same city.

Surgeon D. W. Hand, U. S. Vols., is on leave of absence.

Surgeon T. H. Bnche, U. S. Vols., has been ordered to report for duty to the Medical Director, Army of the Potomac.

Assist. Surg R. R. Wiestling, 45th Penn. Vols., and Asst. Surg. G. W. Hoover, 132d Penn. Vols., to report for duty to the Medical Director at Washington.

So much of Special Orders 365, current series, from this office, as dismissed Surgeon C. L. Hubbard, 12th New York Volunteers, is hereby revoked, he having been duly discharged the service by resignation, previous to his being reported to the Surgeon-General for absence without leave, the offence for which he was dismissed.

Leave of absence has been granted to the following officers: Surgeon D. V. Whitney, 4th Cavalry, Mo. State Militia, to enable him to appear for examination before the Naval Medical Examining Board.

Surgeon T. A. Reamy, 122d Ohio Vols., for ninety days.

Ass't Surgeon W. W. Squire, 131st N. Y. V., for thirty days, on surgeon's certificate of disability.

Ass't Surgeon F. S. Dreadway, 27th Conn. Vols., for twenty days, on surgeon's certificate of disability.

Surgeon C. F. H. Campbell, U. S. V., for seven days, on account of pressing private affairs.

The following named officers have been discharged the service of the United States.

Surgeon J. W. Hunt, U. S. V., honorably, on account of disability.

Surgeon A. J. Berry, 38th N. Y. V., honorably, on account of disability.

Surgeon J. O. Van Hoevenbergh, 120th N. Y. V., honorably, having tendered his resignation on account of private business.

Ass't Surgeon W. H. Lakeman, 76th N. Y. V., has been dismissed the U. S. service with loss of all pay and allowances that are, or may become, due him, having been found in Washington without proper authority, and in violation of General Orders from the War Department.

The muster into service of Surgeon G. Smith, 110th Illinois Vols., has been revoked, it having been made without the consent of the Governor.

On Saturday the 13th inst., Surgeon-General Hammond, with as many members of his staff as could be spared from Washington, visited the battle-ground at Fredericksburg, to give aid to the wounded. They returned on the 19th. Up to the present time 4,700 wounded have been sent to Washington, Point Lookout, and Alexandria. The proportion of slightly wounded is very large, very many being mere scratches or bruises. Three thousand wounded still remain with the army.

The Army Medical Board for the examination of Surgeons and Assistant Surgeons of Volunteers, now in session in Philadelphia, Pa., will adjourn, *sine die*, on the 28th inst. Candidates who may then be awaiting examination will be ordered before a similar Board in Washington, D. C.

So much of Special Orders 289 from the War Department, as relates to the dismissal of Assistant Surgeon McCormick, 134th Penn. Vols., has been revoked, and he is reinstated in his position to date from the day of his dismissal, provided the vacancy has not been filled.

By Special Orders 401, A. G. O., the officers and soldiers wounded at Fredericksburg will be transported, if desired by themselves, to some convenient Hospital of the Government in their respective States. If there be no U. S. Hospital in their own State, they will be transported to some convenient hospital in an adjacent State.

Special Orders, No. 159, from headquarters of the Western Department St. Louis, Missouri, September 6, 1861, by authority of Major-General Fremont, establishing a Western Sanitary Commission, is approved and continued, with the privilege to said Commission of extending its labors to the camps and hospitals of any of the western armies, under the direction of the Assistant Surgeon-General, Col. R. C. Wood, or the senior Medical Officer of the Medical Department.

The Commission will consist of the original members appointed, until otherwise ordered, viz. James E. Yeatman, C. S. Greely, J. B. Johnson, George Partridge, W. G. Elliott.

Medical News.

Petroleum in Surgery.—A patent has been issued in Paris for the preparation and application of new agents for stopping of hæmorrhage, etc., in wounds. They consist of salts made from mineral and essential oils, soluble in caustic potash or soda. They are prepared by taking coal oil, or petroleum, and stirring it cold in about one-third of its weight of caustic soda. It is then allowed to settle for twelve hours, when it settles into two different layers, the lower one being called phenate of soda. The phenate of soda is run off by a tap in the bottom of the vessel in which it is formed. Phenates thus obtained are applied to wounds, to stop hæmorrhage, as follows: If the wound has been produced by a cutting instrument, several folds of a surgeon's compress are dipped into the liquid and applied to the wound. "It neither causes pain nor irritation," says the inventor. The compress is pressed upon the wound, and the phenates freely applied on the outside with a rag. A second compress is then applied, and sometimes four are required, but seldom more. The phenate coagulates the albumen of the blood, and stops its further issue. If the hæmorrhage is caused by a bayonet or bullet, the phenate solution is injected two or three times into the wound, then the opening is stopped with lint soaked in the solution. The superiority of these phenates for wounds is stated to be due, not only to the property which they possess of coagulating the blood, but also of their rendering the edges of the wound insensible, and causing the injured tissues to contract by acting upon them in a similar manner to tannic acid.—*Am. Gas Light Jour.*

Original Lectures.

THE RELATIONS OF ALBUMINURIA TO PREGNANCY.

BEING REMARKS MADE BEFORE THE
NEW YORK ACADEMY OF MEDICINE.

By GEORGE T. ELLIOT, Jr., M.D.

PROFESSOR OF OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN IN BELLEVUE HOSPITAL MEDICAL COLLEGE, PHYSICIAN TO BELLEVUE HOSPITAL AND THE LYING-IN ASYLUM, ETC.

The subject assigned to me in this debate on the very important and valuable paper of Professor Clark, is the consideration of the Relations of Albuminuria to Pregnancy—a subject of vast range, and demanding many subdivisions. It is my purpose to consider it from the standpoint of my personal experience, with especial reference to its clinical relations; rather seeking to offer such a contribution to the debate, than to attempt a more general or exhaustive review. Still the very character of the subject may demand that I should at least cursorily allude to some of those topics which have been so elaborately considered by the distinguished gentlemen who have preceded me.

In using the word albuminuria in its general signification, and considering it both as a symptom and as an exponent of the various morbid conditions in which that symptom may be present, it seems to me that its relations to pregnancy may be thus stated.

Pregnancy presents the great clinical peculiarities of being:

1st. A special excitor in very many cases of albuminuria which had not previously existed.

2d. Of materially developing these morbid conditions in many chronic cases in which they might otherwise have possibly remained latent for a much longer period, or in which they might have disappeared without such excitation: thus offering an inevitable increase of risk analogous to those which we seek to avoid when albuminuria is uncomplicated with this state.

3d. Albuminuria in pregnancy is not only liable to involve all the dangers associated with its existence in other conditions of the system, but, in addition, entails a special liability to some, as convulsions or mania.

4th. It may happen that the unfavorable influences of albuminuria, after remaining latent during pregnancy and labor, may only make themselves felt when it was hoped that the dangers of the puerperal state had passed.

5th. The complications of albuminuria may demand the consideration or prompt performance of all obstetrical operations, both during labor and before labor shall have commenced.

6th. Pregnancy presents the special grave peculiarity of exposing two lives to the dangers connected with the occurrence of these phenomena in one subject.

7th. Experience encourages us to hope that the continued careful study of this subject will enable us greatly to diminish the dangers which we know to be associated with these conditions of kidney.

The subject, therefore, is one of vital interest to the obstetrician, and it is a matter of just pride and congratulation to see the great advances which have been made in its study. There are few more striking illustrations of the progress of pathology than a comparison of the autopsies made in cases of puerperal convulsions, but fifteen years ago, and those of the present day.

The first question to be determined in investigating the relations of albuminuria to pregnancy is the frequency of its occurrence.

While engaged in the study of kiestiene, as a product of pregnancy, with my friend Dr. Henry Van Arsdale, specimens of urine from over one hundred and sixty pregnant women were carefully examined. Of these one hundred and twelve specimens were carefully tested by daylight, with heat and nitric acid, in perfectly clean test tubes, for albumen, and but two presented that ingredient. These observations were made in 1852–3, and are recorded in the New York Journal of Medicine in 1856.

Very few of those specimens were of the urina sanguinis, because, in my desire to avoid the risk of deception and disappointment, they were in the great majority of cases obtained from women who applied to me at the Lying-in Asylum, as Resident Physician, for tickets which would enable them to be attended in their labors by the District Physicians of the Asylum, and the specimens were mostly obtained during these visits.

In a letter which I recently had the pleasure of receiving from Dr. George Johnson, of London, in reference to a patient, he remarks of certain specimens, that "the urine brought for examination was passed after food and exercise, when, of course, it is not more likely to contain albumen than at any other time." I was not cognisant of this fact; but if it be as reliable as the other statements of this eminent observer, then the specimens of urine obtained in the Lying-in Asylum presented all the most favorable requisites for the detection of albumen, and, on looking back to them, both Dr. Van Arsdale and myself can testify to the fidelity and care with which the examinations were made. It is important to add, that but very few specimens were from the early months of pregnancy, as application was generally deferred until the pregnancy was far advanced.

Since the consideration of this topic has been assigned to me, my house physicians, Drs. Nealis and Mola, have procured thirty specimens of the urina sanguinis, in new bottles, from pregnant women, in the lying-in wards of Bellevue. Ten of these were given to Dr. Clark, ten to Prof. Austin Flint, Jr., and ten to Dr. W. H. Draper.

Dr. Draper has made the following report:

Case I. Ellen Regan, æt. 33, first pregnancy. Specific gravity 1020. Reaction acid. No albumen. Microscopic examination: Uric acid, urate of soda, penicillium glaucum.

Case II. Mula Hafman, æt. 19, first pregnancy. Specific gravity 1018. Reaction acid. No albumen. Microscopic examination: A very little pus and vesical epithelium.

Case III. Margaret Donahue, æt. 18, first pregnancy. Specific gravity 1012. Reaction highly acid. No albumen. Microscopic examination: Oxalate of lime, vesical epithelium.

Case IV. Mary Sumers, æt. 26, first pregnancy. Specific gravity 1020. Reaction acid. No albumen. Nothing under microscope.

Case V. Eliza Shell, æt. 22, first pregnancy. Specific gravity 1017. Reaction acid. Slight precipitate of albumen from the presence of pus. Microscopic examination: Oxalate of lime, pus, and vesical epithelium.

Case VI. Ellen McLane, æt. 26, first pregnancy. Specific gravity 1015. Reaction acid. No albumen. Microscopic examination: Oxalate of lime, penicillium glaucum.

Case VII. Bridget McDowell, æt. 26, second pregnancy Specific gravity 1018. Reaction acid. No albumen. Microscopic examination: Oxalate of lime, octahedral and dumb-bell crystals very large and numerous.

Case VIII. Bridget Kelly, æt. 24, fourth pregnancy. Specific gravity 1020. Reaction acid. No albumen. Under microscope nothing noted.

Case IX. Catharine Brady, æt. 24, first pregnancy. Specific gravity 1015. Reaction acid. No albumen. Microscopic examination: Oxalate of lime, a very little pus, and vesical epithelium.

Case X. Mary Clark, æt. 23, third pregnancy. Specific gravity 1021. Reaction acid. No albumen. Microscopic examination: Oxalate of lime and penicillium glaucum.

Prof. Austin Flint, Jr., made the following very thorough report, and presented the ten drawings of microscopic appearances observed, which are herewith presented.

Case I. Rosey Sexton, æt, 25, first pregnancy. Reaction acid, specific gravity 1021.549984. Chlorides abundant, no albumen, no sugar. Microscopic examination: The deposit, which was quite copious, consisted of mucus, a considerable quantity of oxalate of lime, with a few leucocytes and epithelium from the bladder and kidney.

Case II. Mary Riley, æt. 21, third pregnancy. Reaction acid, specific gravity 1018.846920. Chlorides abundant. No albumen, no sugar. Microscopic examination: The deposit was copious, and consisted of mucus, oxalate of lime in large quantities, a few leucocytes, a large quantity of rounded epithelium with some pavement scales. There was also a single cast $\frac{1}{362}$ inch in diameter, of the epithelial character.

Case III. Jane Smith, æt. 17, first pregnancy. Reaction slightly alkaline, specific gravity 1006.733728. Chlorides abundant. Albumen in considerable quantity. No sugar. Microscopic examination: The deposit consisted of mucus, pus, triple phosphates, a few crystals of the oxalate of lime, with a few scales of epithelium.

Case IV. Mary Fean, æt. 25, second pregnancy. Reaction acid, specific gravity 1025.408384. Chlorides abundant. No albumen, no sugar. Microscopic examination: There was a copious pink deposit which consisted of uric acid and urate of soda.

Case V. Mary White, æt. 35, first pregnancy. Reaction acid, specific gravity 1015.376544. Chlorides abundant. No albumen, no sugar. Microscopic examination: Deposit inconsiderable, and consisted of a small quantity of mucus, some epithelial scales, and a few leucocytes. The examination was decidedly negative.

Case VI. Mary King, æt. 22, first pregnancy. Reaction acid, specific gravity 1018.845920. Chlorides abundant. No albumen, no sugar. Microscopic examination: Deposit not very copious, and consisted of a small quantity of mucus, some very minute crystals of oxalate of lime, a few leucocytes and epithelial scales.

Case VII. Jane Russell, æt. 25, fifth pregnancy. Reaction neutral, specific gravity 1017.074240. Chlorides abundant. No albumen, no sugar. Deposit tolerably copious. There was a general haziness over the field, due to a large quantity of mucus. There were also crystals of uric acid, epithelial scales, and leucocytes.

Case VIII. Ann Myers, æt. 25, first pregnancy. Reaction acid, specific gravity 1021.080976. Chlorides abundant. Albumen in small quantity. No sugar. Microscopic examination: The deposit was copious, and consisted of mucus, a few leucocytes, epithelium from the bladder and kidney, with what was apparently granular debris of epithelium.

Case IX. Lydia Brooks, æt. 24, second pregnancy. Reaction acid, specific gravity 1016.919904. Chlorides abundant, albumen a trace, no sugar. Microscopic examination: The deposit, which was tolerably abundant, consisted of mucus, a few leucocytes and epithelial cells.

Case X. Ann Berry, æt. 29, second pregnancy reaction acid, sp. grav. 1020.160960. Chlorides abundant, albumen a trace, no sugar. Microscopic examination: There was a considerable deposit of pus, with a little epithelium from the bladder and kidneys.

Dr. Flint, Jr., then makes the further statement, that all these specimens were examined between half-past eleven and five on the day following their passage. The specific gravity was taken in every instance carefully by actual weight. They all contained more or less mucus, excepting the last, which consisted almost entirely of pus.

Dr. Clark presented the following Report:—

Case I. Charlotte Cafman, æt. 25, first pregnancy, sp. grav. 1020; no albumen by heat or nitric acid; no casts; spores of torulæ; oxalate of lime very abundant.

Case II. Mary Sullivan, æt. 20, first pregnancy, sp. grav. 1020; no albumen by heat or nitric acid; no casts; spores of torulæ; oxalate of lime very abundant.

Case III. Eliza Armstrong, æt. 32, fourth pregnancy, sp. grav. 1030; no albumen by heat or nitric acid; no casts.

Case IV. Delia Sliverake, æt. 25, third pregnancy, sp. grav. 1020; no albumen by heat or nitric acid; no casts.

Case V. Ann Thornton, third pregnancy, æt. 30, sp. grav. 1018; no albumen; no casts.

Case VI. Catharine Reeve, æt. 26, second pregnancy, sp. grav. 1030; no albumen; no casts; pus.

Case VII. Julia Pink, æt. 16, first pregnancy, sp. grav. 1030; no albumen; no casts; torulæ.

Case VIII. Mary Dundas, æt. 35, fifth pregnancy, sp. grav. 1024; no albumen; no casts; uric acid; penicillium glaucum.

Case IX. Ann Moore, æt. 18, first pregnancy, sp. grav. 1022; no albumen; no casts; triple phosphates.

Case X. Catharine Wayman, æt. 33, sixth pregnancy, sp. grav. 1018; no albumen; no casts.

Owing to the turbidity of the specimens a trace of albumen may have passed unnoticed, although any considerable quantity could not have escaped recognition.

TOTAL.

Age.	Pregnancy.	Spec. Grav.
Below 20 5	Primi 16	Between 1010.20 .. 15
Between 20 and 30 .. 20	Mult......... 14	Do. 1020.25 .. 12
Do. 30 and 40 .. 5		Do. 1025.20 .. 3

React. Dr. Clark's not mentioned.	Albumen.	Casts.	Crystals.	Spores.	Pus.
Acid ...... 18 Alkaline... 1 Neutral ... 1	4 cases. 1 a trace. 1 a trace from pus. 1 in considerable quantity from pus.	1 Epithelial	Ox. of lime 9 Uric acid.. 4 Tr. phosph. 2	Torulæ 3 Pen. gl. 4	4

While it is obvious that the particulars recorded of these 142 examinations present a slender contribution to the great mass of observations necessary for the appreciation of the true ratio in which albuminuria is liable to occur in pregnancy, it is also true that, for the elimination of all risks of error, observations should be very numerous in each individual case, because of the recognised fact that the albumen is liable to be absent for variable periods of time, even when the conditions with which it may be associated are fixed and incurable, and from the uncertain time when albuminuria may first complicate pregnancy. It is desirable also to know whether the season of the year or varying hygienic conditions influence its frequency. Still more desirable, if possible, is it to follow up those cases closely which present albuminuria, and learn whether the proportion of absolute recoveries be as complete as many have assumed; and whether multiparæ, who have been the subject of albuminuria in their first pregnancy, are as free from danger of its reappearance as is generally supposed.

Before leaving the subject of the frequency of albuminuria in pregnancy, it is very important to mention that no outward signs can be considered as proof of the absence of this product in puerperal women. My memoranda offer me many examples of the entire absence of such physiognomical relations. Nor does it seem to me that such conditions, either where a previous history of œdema is given, or where no such symptoms have been observed, have any special relations to prognosis.

All the microscopic phenomena observed in these conditions of the kidney, from simple congestion to the most advanced disorganization, may be met with, and their recognition demands all the care, and involves all the difficulties signalized by the gentlemen who have preceded me. Nor, indeed, can they be sought for too carefully, as my cases present me with illustrations

1st. Of cases where I have regretted that thorough microscopic examination had not warned me of the likelihood of more advanced disease than was suspected from the mere presence of albumen, and the attendant premonitory symptoms.

2d. Of cases wherein certain microscopic appearances, as blood corpuscles co-existing in some, with pain on pressure over the kidney, have furnished important suggestions for treatment.

3d. Of cases in which, no albumen being present, the microscope alone has detected the evidences of advanced renal disease.

4th. Of cases wherein cursory examination having failed to present evidences of renal disease, the autopsy has disclosed conditions which a more thorough study would probably have recognised, and brought to bear on the prognosis.

5th. Of a case in which repeated examinations during the first six months having disclosed nothing, albuminuria and convulsions subsequently occurred, and the kidneys have not yet returned to health, although three years have elapsed.

Memoranda of the microscopic appearances observed in nine cases of *convulsions* wherein albumen also existed, show that blood corpuscles existed in six, four of whom were primiparæ, and two multiparæ. Casts were found in eight; oil globules were observed in four. The character of the casts is mentioned in four. In one they were slightly granular, with epithelial cells, and some oil globules. In one, quite granular, with fewer cells and oil globules; in two they were granular and waxy. It is interesting to note that in one of the latter cases blood drawn by us did not contain urea; that patient was a primipara, and did well.

Three of these patients died. In one an autopsy was obtained, and the kidneys were pronounced by Dr. Isaacs to be enlarged and congested, but not changed in structure, affording a very interesting relation to the examination of the urine by Professor Clark, who had found blood corpuscles, but neither casts nor oil globules.

In a case of pleuro-pneumonia and bronchitis occurring a day or two after a natural labor in a primipara, and proving fatal, three examinations of urine were made by Prof. A. Flint, Jr., with his accustomed care. No albumen was found in any of them. The first examination, however, gave a specific gravity of only 1011.370176, and the third examination enabled him to detect small granular casts. There was absolutely nothing in the appearance of this patient or the history of her labor to call attention to the urine; but the examinations were made at my instance, because I suspected that the respiratory diseases were due to or associated with renal disease. The post-mortem examination showed that the kidneys weighed ℥ vj. each. Capsules unadherent, stellate veins being markedly full. A portion of the kidney was examined by Prof. Clark, with the following result:—

"A large amount of granular matter infiltrated into the intertubular substance, though the kidney does not exceed ℥ vj. in weight. Fibrous tissue abundant, with numerous newly formed fibres. A few of the malpighian bodies shrunken, their tufts diminished to one-half and one-fourth their natural size, and pale. The greater number of natural size or larger, and all these of uniform bright red color from congestion, and contrasting very strongly with the surrounding tissues. Capillary vessels themselves not visible; but the coloring matter of the blood seems to be diffused through the tufts. Cells of the tubes all in an unnatural condition, either granular or fatty, and many were both. The amount of oil in none excessive. Cells of the tufts were not fatty or granular."

In a case of bronchitis and œdema of the lung in a primipara after a natural labor, a specimen of urine insufficient in quantity, and in an imperfectly cleaned bottle, was sent to Dr. W. H. Draper for examination; and although he detected some albumen, and some appearances which might be due to the presence of fatty casts, he properly abstained from deciding any questions on that single specimen. He, however, found on examination of a portion of the kidney itself, which I sent him, that the degeneration was more advanced than in any which he had ever observed. "In the cortical portion tubuli were so filled with fat as to obscure, if not altogether to exclude the existence of epithelium. The intertubular structure also was full of oil globules. In the pyramidal portion the degeneration was less complete, but still considerable. Many of the tubes were distended with fatty matter, and many were entirely empty. Some exhibited the epithelial lining imperfectly, the cells being shrivelled and very fatty. The liver also was very fatty. In the uterus, fatty degeneration of the fibres had already commenced.

The autopsy, in one of my cases, presented appearances which always made me regret that the urine had not been examined microscopically. It was loaded with albumen.

The kidneys were examined by Drs. Isaacs and Clark, with the following result:—

The autopsy was made in winter, twenty-seven hours after death.

Dr. Isaacs stated: "In the hottest weather of summer I have often made post-mortem examinations of subjects which had been dead nine or ten days, and wherein the organs were not as much advanced in putrefaction as in the present instance. On separating the capsule from the kidney, the cortical substance exhibited numerous elevations, as in the cirrhosed kidney, and the cortical substance was very much softened, and easily broken down on slight pressure, and gave the same sensation as the liver when this is cut into by the scalpel. On microscopic examination the kidneys were found in an advanced stage of Bright's disease; the malpighian bodies were of various sizes, some of them very small. The fibrous ring of the matrix surrounding them was very much thickened. The capillaries of the malpighian tufts contained numerous oil globules, as did also the minute arteries of the cortical substance. The tubes were generally, and in many instances entirely, denuded of their epithelial cells, many of which were disintegrated or resolved into granular matter. In the numerous specimens which I examined, I could not find anything like healthy structure in the cortical portion."

Dr. Clark corroborated the statements of Dr. Isaacs, and each separately expressed his opinion that the excessively rare degree of softening was probably due to some septic influence with which we are not familiar.

In this case the liver was fatty, the aorta atheromatous, and fat recognised under the microscope in the muscular tissue of the heart, but the fibres themselves had not degenerated.

In one of my cases where albuminuria and convulsions occurred in the fourteenth pregnancy, the microscope gave evidences of advanced Bright's disease in that pregnancy, and the patient died in her next pregnancy hemiplegic and comatose, the microscope having thus confirmed the previous diagnosis. This patient had been fully warned of her danger, but having consulted another practitioner during the intervals of her pregnancy, he examined one specimen of her urine, and from the simple fact that albumen was not present in that one, he reversed the unfavorable prognosis which had been deliberately given by Dr. Bolton and myself.

(To be Continued.)

Serjeant-Surgeons.—John Ardern with Edward III. at the battle of Cressy, in 1349; Thomas Morstede, Surgeon to Henry V., attended him in his invasion of France, 1415; William Hobbys, 1461; Richard Ferris to Queen Elizabeth, 1564; William Clowes, Master of the Barber's Company, to Charles I., in 1638; Richard Wiseman, also Master of the Barber Surgeons, to Charles II., in 1665; Charles Bernard and Ambrose Dickens to Queen Anne; Sir Cæsar Hawkins, Bart., who invented the cutting gorget; Sir Everard Home, Bart., who destroyed the Hunterian MSS.; and Sir David Dundas, Bart., to George III.; Sir Astley Pastan Cooper, Bart., to William IV., and Her present Majesty, as also Sir Benjamin Collins Brodie, Bart., Robert Keate, and now Mr. Cæsar H. Hawkins, the nephew of the aforesaid Sir Cæsar Hawkins, Bart.—*Dublin Med. Press.*

Original Communications.

REMARKS ON THE PREVAILING DISEASES IN THE HOSPITALS AT NASHVILLE, TENN.

By HENRY M. LYMAN, M.D.,
ACTING ASSISTANT SURGEON, U. S. ARMY.

During the greater portion of the last three months Nashville has been isolated by the blockading forces of the enemy, as completely as if situated upon some tropical island beneath an equatorial sun. It is therefore only within the past week that I have received any recent tidings from the medical world of New York. In the meantime we have experienced the "sickly season" of the South, but now the malarious diseases have nearly disappeared, and our hospitals are filled with cases marked by the same familiar stamp which impresses itself upon the inmates of our hospital wards in N.Y. at this season of the year.

The months of August, September, and October, were very unfavorable to health. Not only did our troops suffer from the effects of malaria, but the citizens also were unusually affected with intermittents, remittents, and dysentery. Those who are familiar with the history of the war in the southwest will remember that the winter of 1861–62 was remarkably rainy, and that the rivers overflowed their banks to an almost unprecedented extent. When I arrived here last April, it was by the common people frequently asserted that the approaching summer and autumn would become exceedingly unhealthy, as a consequence of the high water which had prevailed during the winter: an anticipation fully justified by the result. Diarrhœa and remittent fever were the diseases peculiar to August and September; nor was the terrible pernicious fever at all uncommon, though fortunately it was rare in its most fatal form. The force of the disease ordinarily concentrated itself upon the abdominal viscera. A patient would complain of headache, slight chilliness, severe pain in the back and limbs; the skin would assume a bloodless and sallow complexion. Suddenly, the sufferer would be seized with most atrocious abdominal pains, immediately followed by a choleraic diarrhœa, which would soon reduce him to a state of collapse; cold extremities, almost imperceptible pulse, sunken eyes, hippocratic countenance, and a surface smeared with a sticky, stinking perspiration. Applications of mustard, subcutaneous injections of morphine, and the administration of quinine, capsicum, and whiskey, always restored the patient to a condition of comfort in the course of a few hours. This form of the disease was never fatal, unless we must include among these cases the imperfect history of an old man who had been employed as a nurse in the wards of Dr. Kelly, Assistant Surgeon, 1st Tenn. Vols. I had occasionally seen him in the hospital, and had remarked the emaciation of his person. One morning, about the middle of August, on entering the dead-house, I found Dr. Kelly in the act of opening the body of this man. He had gone to bed, as usual, the previous evening, among the patients in the ward. No one saw him move, or heard him complain during the night: when morning dawned, it was discovered that he was dead. The contents of his bowels had been evacuated into the bed: they were thin, scanty, and high-colored. We found the choroid plexuses exceedingly pale; so was the grey matter of the spinal cord. The lungs were healthy; the heart was soft, pale, and flabby. The liver was of the usual size, but of a lighter color than in health; its vessels were full of liquid blood. The colon was contracted, and the mucous surface of the alimentary canal, from the pyloric orifice of the stomach to the anus, was intensely and darkly congested. The stomach was large and lax, containing nearly a pint of fluid resembling dirty dish-water. The intestines were empty: several small ulcers were located in the sigmoid flexure of the colon, and patches of ecchymosis were scattered at long intervals over the surface of the transverse colon.

Scarcely two weeks had elapsed before I again witnessed a post-mortem examination following another case of sudden death in the wards of Dr. Kelly. It was at the time of the withdrawal of General Buell's army from southern Tennessee, a movement which threw upon our hands all the patients who had accumulated in the hospitals at various points along the Tennessee river. Passing through his wards one evening, after an arrival of this sort, the doctor noticed a young man, about twenty-five years of age, large, muscular, dressed in the uniform of a private, and seated upon one of the beds. He said that he had been *sick with a fever* for three weeks in a hospital at Huntsville, Ala. He was convalescent, and complained of nothing but the fatigue resulting from transportation over more than a hundred miles of railway. Next morning his body lay cold and dead in the position it had occupied when he fell asleep. The base of the middle lobe of the left cerebral hemisphere was slightly softened. The grey matter of the brain was darker than is commonly observed. Points of blood followed the knife on transverse section of the white substance of the cerebrum. The lungs presented a beautiful specimen of health. The left ventricle of the heart was firmly contracted, while the right side of the heart was lax, and gorged with blood. The right ventricle was occupied by a large clot. The pericardium contained about four ounces of fluid. The appearance of the liver was in every respect natural. The intestines were empty, and the calibre of the colon was much contracted. The spleen was of the usual size and consistence. The kidneys were very large, weighing respectively nine ounces and nine and a half. They were purple with contained blood, but otherwise did not exhibit any visible sign of organic disease. The cortical portion, and the tubular portion, were well defined, and properly proportioned to each other. Beyond these appearances we could recognise nothing abnormal in any region or organ of the body.

What killed these men? I incline to the belief that they fell victims to the action of malarial poison in constitutions debilitated by disease and fatigue; yet, if so, why was a fatal result not more frequent among the patients who crowded our hospitals? almost without exception they were, in one way or another, suffering from the influence of malaria. Why does one person suffer pneumonia, while another who has been similarly exposed is attacked with pleurisy, and a third, perhaps, escapes with a simple catarrh?

The first week of September was marked by a great aggravation of the symptoms in all cases of disease that fell under my observation. For nearly a month there had been no rain; the daily mean temperature had varied little from 80° Fahrenheit till the last of August, when a north wind and a light shower had cooled the night air to about 60° (the exact memorandum of dates and thermometrical observations was lost during my subsequent illness), rendering blankets necessary for two nights in succession; but the wind soon reverted to the southern quarter, and the mercury again rose to a daily mean of 81° or 82°. Patients suffering with chronic diarrhœa immediately became worse; those who were convalescent from remittent fever, experienced a relapse; pernicious attacks, affecting the bowels, were continually occurring; while those nurses and attendants who did not actually succumb, by their straw-colored complexion and debilitated limbs bore witness to the prevailing presence of a morbific agent from which there was no escape. [It was at this time that I was permitted to observe the symptoms which marked the termination of a fatal case of the algid variety of pernicious fever, occurring in the person of a lady who had been previously much exhausted and anæmiated during a lingering recovery, after confinement in the early part of summer. For two or three days the onset of the disease had been heralded by occasional apparently trifling nervous phenomena connected with respiration. But, at noon, one day, there came a slight sensation of chilliness, which soon passed off. During the latter part of the following night there was a degree of nausea, and some diarrhœa. About eight o'clock the next morning an algid paroxysm suddenly declared itself, and, before medical assistance could reach the sufferer, her pulse had stopped, her face was blue, her breath was cold, her extremities were icy. Stimulants, counter-irritants, hot air, and quinine produced a partial reaction, though the pulse never returned to the wrist. For a short time recovery seemed probable; the countenance became natural, warmth returned to the surface, and a delusive calm pervaded the frame. But soon the insidious destroyer renewed its attack; the action of the heart continually increased in frequency and diminished in force; respiration became hurried and laborious; clammy perspiration moistened the skin: less than fifteen minutes passed before life was extinct. Death occurred just three hours after the commencement of the pernicious paroxysm. Five days after this I was myself prostrated by an algid paroxysm, supervening upon a masked intermittent by which I had been haunted for eight days. The ordinary routine treatment was powerless in combating this insidious invasion of the disease. For more than two months I had used daily *prophylactic* doses of quinine, and, supposing myself sufficiently protected by the drug, had always exposed myself fearlessly to the influence of malaria, often sitting till late in the evening under the trees which shaded the house in which our hospital staff was quartered, and sleeping with the windows of my chamber open to all the night air that could be admitted. Chilliness, and febrile movement of the circulation, had no place among the symptoms of the disease. Quotidian misery, gastric distress, nausea, and physical weakness, were the prominent symptoms which preceded the culmination of the attack. Its onset was sudden, terrible, and unexpected—at the very moment when an icy hand seemed to crush my heart in its grasp, while black night gathered around me, my ears were ringing, and my brain was whirling under the influence of not less than twenty grains of quinine administered eight hours previously.]

Owing to the existence of a "military necessity," the University Hospital was closed on the twelfth of September. The patients were removed to quarters nearer the centre of the town, and a camp was formed upon the grounds about the buildings. For two months Nashville was a beleaguered city, and the sick were often without diet appropriate to their condition. Strong foraging parties procured a supply of corn and meat, but milk, eggs, butter, fruit, vegetables, coffee, tea and sugar existed only as shadowy memories of the past.

During the latter part of September, and during the month of October, dysentery became remarkably prevalent throughout the town. In the hospitals it usually occurred among patients who were convalescing from remittent fever. It was seldom unmanageable, but yielded readily to the action of sulphate of magnesia administered in small and frequent doses till the tenesmus was relieved, and the stools became copious, when a few grains of opium were sufficient to complete the cure. But I was informed by an experienced physician, long resident in Nashville, that in three instances among his own patients this dysentery terminated with a well marked paroxysm exactly resembling the worst paroxysms of pernicious fever. Two of these cases proved fatal; the third was with the greatest difficulty rescued from death. And yet some of the most distinguished medical men, who for years have practised in this city, assert that malaria does not exist in Nashville. They are fond of attributing the occurrence of pernicious fever—for they do not dispute its fatality during the past season—to the presence of so many soldiers, and to the filth consequent upon crowding camps around the borders of the town. "*Credat Judæus!*" Were I disposed to accept such a theory, it is not necessary to visit the camps in search of filth: I cannot decide whether to prefer the alleys of Nashville or the streets of New York!

Reviewing the meteorological history of the past summer, it is interesting to remark the fulfilment of the conditions supposed to be necessary for the production of malarial poison. The spring months were very rainy, and the rivers overflowed their banks. May and June were cooled by frequent showers, but the month of July introduced a season of drought, which is not at an end. Rain has fallen only in slight showers at long intervals; the whole country has been dried and parched by the burning sun, while the rivers have receded to a point not before reached since the year 1839. It has been during the fortnight or three weeks immediately succeeding the showers which have occasionally moistened the surface of the earth, that the malarial influence has seemed most intense. Do not these circumstances lend additional weight to the teachings of Dr. Bowling, the learned Professor of Theory and Practice in the University of Nashville, who believes that malaria results from the action of intense solar heat upon watery particles which are hindered from free evaporation, as when the rays of the sun draw vapor from the lower strata of riparian slopes, or from the moist sub-soils which often underlie a sandy surface, or from the sap that is imprisoned within the trunks of lately fallen trees? It is thus that he accounts for the insalubrity of recent clearings in the wilderness, where the forest trees have been "deadened" and allowed to dry away in the sunshine. I am tempted to inquire if the frequent flooding of the soft pine-wood floors of our hospitals tends to generate malaria among the patients in the wards.

Be these things as they may, the heats of summer are at an end. To us the winds of winter and the advancing armies of the Union bring health and plenty in their train. Once more, to southern soil a bright November sky reveals the glory of the North. On every hill-side shines a tented camp, and through all the streets resounds the noise of men and of horses caparisoned for war. Nashville is the centre, and will constitute the base of military operations in Tennessee. Fourteen hospitals are crowded to their utmost capacity: additional buildings will soon be opened for the admission of patients. The record of the approaching campaign will form an interesting chapter in the medical and surgical history of this great rebellion.

General Hospital, No. 13, Nashville, Tenn., Nov. 26, 1862.

OPERATION FOR
COMPRESSION OF THE SPINAL CORD,
WITH REMARKS,
By H. A. POTTER, M.D.,
OF GENEVA, N. Y.

A. M. Salsbury, of Phelps, Ontario county, New York, while engaged in gathering walnuts, in October, 1859, fell from a tree a distance of twenty feet, and fractured certain vertebræ in the inferior cervical region. Three days after the accident I was called in consultation. The patient was perfectly conscious, but was unable to move any part of the body or extremities, except the hands, which he could slightly raise, but which would fall upon reaching a certain point, without the least control of the will over them. Sensation was as imperfect as the motion. The patient being a fleshy man, it was difficult to determine the exact point of injury.

It was decided I should operate, which I did, October 9, 1859. I found the spinous process of the sixth vertebra fractured and displaced, and the arch of the fifth crushed in upon the spinal cord, nearly separating it longitudinally. With some difficulty I removed all that portion comprised in the lamina and spinous process of the fifth and the spinous process of the sixth cervical vertebræ. The sheath of the spinal cord was entire, but, as before stated, the cord itself was much injured.

I did not see the patient again until the following January, at which time the wound was nearly healed, and he was as comfortable as could be expected; he could sit in an easy chair, could readily move his head, and could converse as freely as any one. He had gained very little from the operation—sensation and motion being as imperfect as when first injured, except that he could use his left hand a little more freely than before. He remained in this unhappy condition until November 29, 1862, when I was again called to see if something might be done to relieve him. During the past three years there had been some spasmodic action of the lower extremities, and thinking that some compression might still exist—which, from the stout and fleshy condition of the neck, had escaped detection in my first examination—and as the situation of the patient could not be made worse I determined upon another operation, which was made in the presence and with the assistance of Dr. Dox, of Geneva, and Dr. Carpenter, of Phelps.

I removed the fourth, sixth, and seventh cervical vertebræ, which left the portion of the spinal cord covered by the four inferior cervical vertebræ entirely exposed. The cord had not united, but at the point of the first operation t was well protected by a thick substance, resembling the coat of a large artery. At least an inch of the superior portion of the exposed part was much flattened and thinned, but the sheath was entire. At the connexion of the first dorsal vertebra the cord was full, and, to all appearance, in a normal condition. There was no pulsation at any point exposed, but there had been at the first operation; and, in my judgment, the pulsation of the cord will determine very correctly the diagnosis as to the extent of the injury. In two cases upon which I had previously operated, the cord could not only be felt but the *pulsation could be distinctly seen.* In both cases it was simply the yoking in, as it were, of the arch of the vertebra upon the spinal cord—the cord not being in the least separated. The first case was of five months' standing, and was the most perfect instance of paralysis and loss of sensation I have ever seen. A report of the same may be found in the *Journal of Medicine and Collat. Sciences* for March, 1844. It was, I believe, before the time of chloroform, and sensation returned instantaneously upon removing the compression, and a perfect recovery was effected. The other case I did not report. The patient was a colored man by the name of Susey. The operation was performed at Geneva, New York. I removed the posterior portion of the three inferior cervical vertebræ, and found the cord had simply been pressed against the body of the spinal column; the cord was not separated, and pulsated freely. I had great hopes of his recovery, but he died the fourth day. An autopsy showed fracture of the left parietal and occipital bone. A large clot of blood was also found around the foramen magnum, which was beyond doubt the cause of his death.

The last operation upon Mr. Salsbury has as yet proved of no benefit to him, and it probably never will, as nearly all connexion with the brain is obliterated.

There are two points I wish to call the attention of the profession to in connexion with this class of injuries. The first is, that, in all cases which have come under my notice, and I have seen eight, *when blood is taken from a vein of the arm it is arterial.* A letter may be found upon this subject, addressed to Charles A. Lee, M.D., in the journal before referred to in this communication. I have bled several for the purpose of testing the fact, and have always found the same result. This being true, the change from arterial to venous blood must be dependent upon the cerebro-spinal action of the nervous system, and it is not absolutely necessary for the change to take place in the passage through the system.

The second point is, that, immediately after the receipt of the injury, the patient begins to lose flesh, and during the first few weeks becomes much emaciated. Arriving at a certain point the recuperative powers of the system seem to rally, and nutrition appears perfect—the patients gain flesh in about the same proportion as it was lost.

Why is this, and what is the cause of the suspension and restoration of nutrition? My own opinion is, that suspension of nutrition is *in consequence of the loss of the nervous action.*

But what restores it? It cannot come from its original source, for the cause is not removed, and there is no sensation or motion below the injury, and no direct communication with the brain.

I think the ganglionic system is entitled to more investigation. May we not find there a reserved power, which, after the suspension of the spinal nerves, develops itself and supplies in part or whole the want? Does not each ganglion become enlarged and act as a little brain, so far as the nutritive process is concerned? I leave this and the question of the unaltered state of the blood for others to investigate. There is no class of cases which has received so little attention in the right direction, as injuries of the spine, and surgery has not done its whole duty until every effort is made to remove the cause in lingering cases, and this should be done early.

Mr. Cline first operated for fracture of the spine. He was followed by Mr. Terryll and Sir Astley Cooper; and the latter eminent surgeon says, and none can gainsay it: "The operation is laudable and not severe, nor does it increase the danger of the patient, and experience can only determine its value. If we could but save one life in a hundred we deserve well of mankind."

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, Sept. 10, 1862.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

(*Continued from page 7.*)

MORBUS COXARIUS.

Dr. Krakowizer.—The second specimen is the head, neck, and trochanter major of the femur, which I resected a couple of days after the one whose history I have just given. The patient was a boy of very healthy parents, who, I don't remember how long a time ago, showed the first symptoms of coxitis. He was under the charge of Dr. Voss, who treated him by Dr. Davis's plan. The disease had made some progress before the doctor's assistance was called for, and he had the benefit, if benefit it may be called, of Davis's splint for a very short time. The patient was placed in bed and the apparatus there applied. Several abscesses had formed, which at the proper time were opened. Dr. Voss leaving the city temporarily, the charge of the case devolved upon me. It was evident to me that an operation was needed, but the mother could not consent to it as she was approaching confinement, and did not, under the circumstances, feel that she was able to nurse the child after such an operation as should be performed. We were therefore compelled to wait. The child was very much reduced by the suppuration, and at one time had a large bed sore all over the sacrum, which had just healed up by the 11th of July, when the operation was performed. In this case the disease of the pelvic bone was more extensive than in the first case. This child being larger than the other, the absorption of the head and neck did not progress so far, although the shape of the head was considerably altered. The acetabulum was transformed into an irregular wide carious cavity, and the adjacent parts of the ischium were superficially bare. The diseased bone was removed from this surface by means of the gnawing forceps. The extreme feebleness of the child after the operation made me apprehensive that he might die from the shock, and although he rallied very well, the bed-sore which had previously existed over the sacrum, again showed itself, exposing bare and dead bone beneath. Bed-sores also formed on the bases of the iliac bones, and over two or three processes of the lumbar vertebræ. A metastatic abscess formed on the shoulder, and also under the fascia parotidea. During this time, the patient was only kept alive by enormous doses of whiskey. I told the father, in order that he might understand the extent to which I wished to administer the remedy, that he must literally "pour it down." The next day I was amused to learn the frightful quantity of the whiskey that had been taken and retained. I have no doubt that the safety of the child was due to this circumstance. So far reduced was the child at this time, that a medical friend who called to see the child the evening before, reported to me that it was moribund, and left instructions with the parents to call around at my office for the certificate of death. I opened the metastatic abscesses, the necrosed portions of the sacrum exfoliated, the suppuration diminished, and the appetite increased. · The child commenced then to have pleasure in moving the limb, while the extension was kept up. There are now left only a couple of abscesses which discharge matter. It seems as if this discharge came from parts that are deep and from carious bones. I have not probed the opening, but the condition of the patient has been so good, that even if carious bones still be present, they will readily separate. In any event, I shall report the termination of the case. If the child dies I shall procure a specimen, and if he perfectly recovers I will exhibit him in person.

Just after the operation, I allowed the same amount of extension to be kept up, with the addition of a cushion on the outer aspect of the leg, to prevent the foot from rolling outwards.

Dr. Prince stated, that having seen a number of cases of this disease operated upon by Dr. Sayre, he had found that in all those in which the wound was left open, the recovery was more rapid and certain.

Dr. Krackowizer held to the view that it was best to close the wound, and leave as little granulating surface exposed to the air as possible. If, however, there should be a tendency afterwards for the matter to accumulate, not having a free enough vent, it was then time enough to enlarge the opening.

Dr. Buck's experience was in favor of closing such wounds, and procuring union by first intention, so far as was consistent with the free escape of pus.

RUPTURE OF UTERUS.

Dr. Connolly presented the uterus of a woman thirty-five years of age, who had been taken in labor with her eighth child, on the night of the Friday previous. Her labor continued until five o'clock Saturday morning, without any abnormal symptoms, when her pains rather suddenly ceased, and she was seized with incessant vomiting. The midwife, thereupon, becoming alarmed, sent for a physician, who arrived at eight o'clock. He found the head in the superior strait, gave a favorable prognosis, and prescribed ergot, and awaited the result. There, however, was no return of the pains, the vomiting continued all through that day, and she complained of excessive pain and tenderness over the whole abdomen. She sank and died about eleven o'clock that night. A post-mortem examination was made eleven hours after death. On opening the abdomen a considerable quantity of fœtid gas escaped;—the body of a fœtus, with the placenta, was floating around among the intestines, having escaped through a rupture of the anterior surface of the organ. The head was engaged in the superior strait, the margin of the rent surrounded the neck of the fœtus, while the uterus was firmly contracted and posterior to it. There were no osteophytes from the pubic bone, neither was the tissue of the uterus in any way softened. The patient was considered healthy up to the time of the delivery. The point of interest in the case was the fact, that the physician should have attended her for sixteen hours without anticipating the causes of the symptoms until one or two hours previous to her death. A sufficient inspection of the abdomen, had it been made, would have been sufficient to have cleared up the case.

Dr. Krackowizer was inclined to believe, that at first the fœtus was in a transverse position; that strong labor pains came on, that the uterus was ruptured, and then the head, as is usual in such cases, came down to engage itself in the superior strait. If the head presented at first at the superior strait, it would have made its appearance first through the rent.

Dr. Connolly thought that this view of the case was rendered untenable from the fact, that the head was engaged so firmly that it required some effort to displace it.

The Society then adjourned.

NEW YORK COUNTY MEDICAL SOCIETY.

ALFRED UNDERHILL, M.D., PRESIDENT.

[Reported by Guido Furman, M.D., Secretary.]

This society held a stated meeting at the College of Physicians and Surgeons, on Monday, Dec. 1, 1862, at 8 P.M. The Secretary read the minutes of the preceding meeting, which being accepted, the several standing committees made their reports.

The report from the Committee on Disease led to the discussion of diphtheria, in which Drs. Bulkley, Stone, Henschel, Drake, and others participated; nearly all advocating the tonic and stimulating treatment. Dr. Drake remarked that this disease was not peculiar to the human family, but that he himself had witnessed the existence of it in a number of fowls. The discussion of this malady will be the leading subject for the next regular meeting, when it is expected that the different city dispensary physicians will participate in the same.

Dr. Thomson finished the reading of his paper on "Medical Observations in the Inspection of 9000 Recruits."

This paper was followed by a monograph on typhus, by Dr. Henschel. He supported the theory of the cyclical return of this zymotic disease, which, if it have not proved fatal by the overpowering influence on one of the nobler organs, must of necessity return to health. He then gave the different forms and localization of the disease, with their treatment, depending chiefly on the stimulating; confining the exhibition of large doses of calomel to the enteritic form, with not considerable or without any amount of diarrhœa.

FOREIGN CORRESPONDENCE.

LETTER XIX.

By PROF. CHARLES A. LEE.

CRETINISM (*continued.*)

Interlaken, Sept. 6, 1862.

In my last letter I gave some account of Dr. Guggenbuhl's establishment on the Abendberg, for the treatment of cretinism and idiocy, and his views, in brief, in regard to the causes, pathology, and treatment of this peculiar form of disease. As I am preparing a paper on the subject, to be laid before the "New York Academy of Medicine" at some future period, I shall not at present enter upon it at any length, reserving for that communication the particular results of my observations both in the valleys of the Alps and in other parts of Europe. No one who has not travelled in this country can form any idea of the vast number of cretins met with among the valleys of Switzerland, nor the wretched condition to which they are reduced. They are found in every low hot valley among the mountains; and in some of the villages of the Valais in the valley of Rhone, I was informed that one-third of the population were cretins. For several miles above Martigny the bottom of the valley is a mere swamp, made desolate and unhealthy by the overflowings of the Rhone and its tributaries; owing to the dead level of the surface the waters are not drained off, and a most intense and malignant malaria is generated. There is a saltiness and stifling heat throughout its whole extent, that I have never experienced in any other part of the world. There seems a perfect stagnation of the atmosphere, and all nature seems to droop under its influence. Goitre, cretinism, and ague are endemic through the whole region, and the whole native population bear the marks of decrepitude, deformity, and premature old age. Rushes, rank grass, and alders are the only vegetation that grows on the flats. At Sion, the capital of the Valais, containing some 2500 inhabitants, is a hospital, in charge of the sisters of charity, containing many aggravated cases of cretinism and goitre. This is, beyond all dispute, one of the most wretched and miserable districts in Europe, although formerly, judging from the ruins of numerous castles and churches, a highly prosperous and flourishing region. For some reason the human race here has undergone sad deterioration, till at present the population are steeped in poverty and disease. The cretin here, at least, is not only an idiot, but something more. With a vacant, distorted, and hideous expression, his head seems disproportionately large; his belly protuberant and enormous; his limbs stunted, dwindling, and crippled; his muscles soft and flabby; his circulation torpid; skin livid, cold, and clammy; he cannot speak at all, or if he can, with great difficulty and indistinctness. He is incapable of any work, but lies basking in the sun like a torpid serpent, seeming to derive great gratification from its hottest rays. If he has life enough and is able to move or speak, he is an importunate beggar whenever a stranger appears, chattering and grinning like a monkey, and displaying hardly as much intelligence. There is, of course, every grade of the disease, from slight goitre to absolute decrepitude and helplessness. It is a singular fact that the disease is unknown 3000 feet above the sea, which effectually disposes of the snow-water theory. At Sion, and other places in the Valais, it is very common to remove children and even adults to the mountains, on the appearance of any symptoms of goitre; and it is said that the disease is arrested if this is resorted to at an early stage. I suppose it can hardly be doubted that, as Dr. Guggenbuhl maintains, cretinism is one of the injurious effects of intense malaria, as it is found chiefly, if not entirely, in low, warm, and moist situations, as at the bottom of valleys, where exhalations are not dissipated by winds, and where there is a stagnation of the air. A *high dew point*, also, will probably be found to have much to do in causing it. In regard to *goitre*, however, there are many facts going to show that it may be produced by some mineral substance, probably some combination of lime in the water. We meet with it very often, for example, in central New York, adjacent to the Seneca and Cayuga lakes; and Dr. Coindet of Geneva (Switzerland) informs me that there is a well in Geneva which has had to be sealed up, because whoever drinks of the latter for any length of time is attacked with goitre. Thus of a French regiment of soldiers, formerly stationed in that city, and who drank of the water for a considerable period, a majority were sooner or later affected with goitrous swellings about the neck.

In regard to the hereditary transmission of cretinism, Dr. Guggenbuhl made some statements which were new to me, but for the truth of which I do not vouch, inasmuch as they are opposed to general professional opinion on these subjects. He said that if a cretin mother had a child by a man not a cretin, the child would not be a cretin; and, on the other hand, that if the female was not a cretin, while the father was, the offspring was always a cretin. "The mother," added the Dr., "has nothing to do with the intellect of the child, all depends upon the father. Thus there is a family of mathematicians in Basle, celebrated for mathematical talent for many generations, and yet there have been several mothers in the family of feeble intellect. The same is true of the Munroe family of Edinburgh, so celebrated as anatomists. Similar examples can be found in every country. The reason why Schiller, Hufeland, Oké, and other great men, have had no children of eminent talent, is, that they overworked their brains, and exhausted their nervous energy by hard study and profound thinking. No, no; all intellect is transmitted solely by the male." I give this for what it is worth, as any remark from so intelligent and careful an observer as Dr. G. is worthy of attention. Most people will be guided on this subject by their own observations, which, if I am not mistaken, will be found quite opposed to the theory of Dr. G. But the fact related in regard to cretinism is certainly very remarkable, and deserves further investigation.

As Dr. G. was one of the first who attempted to cure or instruct cretins, it may be well to point out his mode of procedure more in detail. Often developing the physical powers as far as possible by exercise, medication, and nutritious food, etc., he tried to rouse the ear from its habitual torpor and apathy, and this he did by compressing the sound through a tube into the ear itself. He then taught the child to perform with its mouth the motion required to express the sound, and so to connect the sound itself with the mode of expressing it. This is a tedious process, and sufficient to test the patience of any man It thus passes through the vowels, then the consonants; and to bring other organs into play, the letters were carved out in wood, and the cretins were taught to connect these with the sounds, according as the organs of touch or sight were developed. Gradually, by this method, they were taught to form words, which they uttered. When all this was acquired, which often took months or even years, common objects, such as keys, knives, forks, spoons, etc., were painted, and the objects laid before them. They thus learned not only to distinguish them, but to lay them on their pictures. If this process did not avail to fix the sight on any object, marks or letters were made with phosphorus on the walls of the room, the room being darkened. This method often proved effectual when other means failed. It was also necessary to develop the senses of taste and smell, which are very faint if it all possessed by cretins. From four to six months were usually necessary to bring the patients to such a degree of bodily vigor as to be prepared for instruction. The means of instruction and training seem, in short, to have been the same as those now employed in asylums for idiots. To instil knowledge by means of visible objects, is not only the best method of awakening a dormant mind, but it is nature's mode of imparting ideas and training all the senses. The mind of an idiot, as well as of a healthy child, can only be developed and strengthened through impressions on the sensual organs.

As Dr. G. considered debility as the predominant feature in cretinism, the guiding principle of his treatment has been to strengthen and arouse the system. He started with the belief that mountain air was essential; hence his establishment 3000 feet above the sea. He believed that the activity of the body might be aroused by means of the skin, for he had observed that whenever the capillary circulation could be restored to the surface, and the temperature of the skin became natural, it was always an indication of renewed strength and vigor; hence his frequent use of frictions and tepid aromatic baths. After a good degree of tone was restored, he then found ablutions and friction with cold water, useful in strengthening the limbs. In rickety cases, with crooked limbs and weak or distorted spines, electrical baths were found of service. His gymnastics consisted in making his patients climb up ladders, especially backwards, then raise weights on a measuring machine. The American *baby-jumper* was put in requisition for small children who were unable to walk alone. To those were added exercises of all kinds in the open air, the cultivation of small garden patches, etc. Iodine and iron were the chief medicinal remedies used; wine he found to have a bad effect on the brain, and seldom gave it, and then only in small doses.

Whatever may be the demerits of Dr. G., it must be admitted by all that the medical treatment and training of cretins owe their origin to him, and that he has been the means of exciting great interest in the subject in other countries. The king of Wurtemburg was stimulated by his visit to Dr. G.'s institution to order a census to be taken of cretins in his kingdom, which resulted in the establish-ent of an institution near Stuttgard in 1847, for the recepion and treatment of this class of patients. This institution ow contains about 100 cretins, classified according to their ondition or capacity of cure, and is mainly supported y the government. Another similar establishment was pened at Winterbach, in the valley of the Rems, where here are numerous cretins, and both these may be traced o the efforts of Dr. G. In the kingdom of Wurtemburg, ccording to the above census, there are 5000 of this nfortunate class. The king of Sardinia, now of Italy, earing of the good results of Dr. G.'s labors, named a ommission, headed by Dr. Lella, to inquire into and report pon the facts connected with the institution of Dr. G ; he lso ordered a census to be taken of their numbers, in his hen limited kingdom. On the southern slopes of the Alps lone 7000 were discovered. Corresponding measures were aken for their treatment and cure. Measures have been aken in Russia and in other parts of Europe, to ascertain he numbers of cretins, and to found establishments for heir proper management. The French Academy of Sciences appointed a commission in 1860 to report on this ubject, of which MM. Andral and Rayer were members, nd recently another commission has been named by the Ministers of the Interior and of Commerce, to investigate nd report on the causes of cretinism in certain provinces of France, and the best means of remedying them. M. Rayer presides over this commission. Our own Academy of Medicine has also, I believe, at Dr. G.'s request, appointed a committee to investigate the subject of cretinism n our own country. These and numerous other efforts in his direction, have all grown out of the labors and exerions of Dr. G. He gave the first impulse; his patience, enevolence, and philanthropy surmounted all obstacles, nd the world owes him a debt of gratitude it can never ay. To see a man of more than ordinary talent devote all his means, his entire energies, and his whole life to elevate this miserable class of beings, must send a sympathizng thrill through the breast of every friend of humanity.

For some time Dr. G. tried to apply the phrenological docrines of Gall to cretins and idiots, but the results were by no means satisfactory. It was soon evident that the pathological condition changed and perverted the physiological conditions of the organs. He, however, has made one very mportant observation in regard to the conformation of the palate in idiots, which may be susceptible of useful applicaion in medico-legal cases. He says that in a normal state he border of the floating palate is a complete circle, but hat in the idiot it is of an oval or egg shape, which he ttributes to atrophy of the base of the brain. Scoutetten ttaches considerable importance to this malformation, and says it may assist in throwing light on the intellectual condition of subjects submitted to our examination, and sometimes to save persons charged with crime from punishment, when the acts were unconsciously committed, and were those of an irresponsible agent. This writer even menions instances where he has successfully applied this test n such cases, and he commends it as a subject worthy of study both by magistrates and physicians. I am informed by Dr. G. that he contemplates ere long going to America, which he has long had a desire to visit. I have assured him of a cordial reception, and I trust he may be welcomed as such a true friend of humanity and science deserves. He certainly has done enough to entitle him to our admiration, espect, and gratitude, and these, I believe, will be awarded him wherever he may go.

MM. BARTHEZ and LAPEYRONIE are to be honored by the elevation of statues to their memory. MM. Gumery and Laury, Parisian sculptors, are charged with the execution, he first of Lapeyronie's, and the second with Barthez's staue. The statues are to be placed at the end of the bridge which leads to the School of Medicine.—*British Medical Journal.*

American Medical Times.

SATURDAY, JANUARY 10, 1863.

SANITARY INTERESTS OF NEW YORK.

IN his annual message to the Common Council, the MAYOR devotes a section to the Sanitary interests of the city, which deserves a passing notice. From it we learn that the Board of Health, composed of the MAYOR and Common Council, has not been convened since September, 1860, for this, among other reasons, that its members are all laymen. To us, this is a good and sufficient reason, but it should have had no weight with the MAYOR, who proceeds to state that the City Inspector's Department has discharged its important duties with fidelity and success. Now, the City Inspector's Department, containing one hundred and thirty-eight officials, has but a single subordinate claiming a knowledge of medical science, and he is but a clerk. The great majority of employées in this department belong to the lowest strata of society. Many of the Health Wardens, the most important officers in the city government if they rightly discharge their duties, are registered among the most disreputable class in the community. They were "emigrant runners," "bar-keepers," "policy dealers," "rumsellers," etc., before being called to discharge the high functions of guardians of the public health. How have these men discharged the important duties confided to them with fidelity and success! Their special duty is Sanitary inspection; to search out the causes of disease, and remove them, and to make a house-to-house visitation of their districts. Even if they were capable of discharging such trusts intelligently, what citizen will credit the report that they have discharged them with "fidelity and success?"

The Commissioners of Health, over whom the Mayor himself presides, are highly complimented for their devotion to the Sanitary interests in the city. The MAYOR attributes the decrease of small-pox this year to the influence of DR. SAYRE's report on the necessity of compulsory vaccination. With the medical public this statement will be received as a *post hoc* with that illogical, irrational *ergo hoc* credulously appended, which an enthusiast is apt to conjure up. The simple truth is, that the year following the general prevalence of small-pox is always remarkably free from this disease, owing to the increased attention given to vaccination. The records of the health department show that during the last fifty years there have been regular epidemics of small-pox, and that the year following its prevalence the city was almost free from the disease. The report alluded to was, however, a valuable one, and deserved honorable mention, though it was scarcely necessary to allege that it opened the eyes of the profession to the importance of vaccination. We could suggest that the remaining six thousand copies on hand be distributed among the people, for it is the general not the medical public which needs light.

In the management of Quarantine much, and we believe due credit is given to the Health Officer, DR. GUNN. The prevalence of yellow fever in many tropical ports, during the summer, led to the quarantining of more vessels than in the three preceding years. The total number was 251, of which 916 cases occurred on board, and 445 deaths. Forty-four cases were admitted to the Floating Hospital. Quarantine, under Dr. Bell, of which 18 were fatal. The Mayor calls attention to the necessity of storehouses at Quarantine, and we hope attention will be given to his suggestions. Aside from the advantage which would accrue to commerce, it would entirely obviate the necessity of discharging suspected and perishable cargoes at the warehouses of New York and Brooklyn. A modification of the quarantine laws is also advised, in order to render them more efficient.

The Mayor speaks flatteringly of the *improved* (?) hygienic condition of the city, as shown by the aggregate of mortality, being 21,244 for the present year, against 22,117 for the year preceding. The difference is 873 in favor of the past year. But in another part of the message we learn that this city has contributed upwards of 80,000 volunteers to the armies of the United States. If these are taken into account it will be found that the mortality last year was greater than the year preceding, even admitting the deaths of soldiers. But aside from these considerations no intelligent man would find cause for congratulating a city on its healthfulness which now annually loses one in thirty-six of its inhabitants. If New York were as healthy as London, the mortality for 1862 would have been about 12,000. Such a reduction in an annual death rate would, indeed, be cause of congratulation. The country is horrified when a thousand fall victims in an ill-fought battle, but in this city 10,000 annually die of diseases which the city authorities have the power to remove, and no one is shocked. Instead of the sympathy of our rulers in our afflictions, we have their congratulations!

The Mayor closes this portion of his message with the statement that the Health Department is susceptible of improvement, and suggests, that if an effort is made to revise the Charter, "competent medical gentlemen and others, who have studied the hygiene of cities, should be consulted as to the needed changes in this department." He regards the failure of the Metropolitan Health Bill as "most fortunate for the city," because it took the street-cleaning out of the hands of the people of the city, and placed it in the hands of a State Commission. He alleges also that the Bill was very imperfect in other respects which he does not mention. It will never cease to be a source of profound regret to that class of citizens who have labored diligently for years, with much self-sacrificing, to improve the Health Department of our city, that the Mayor should have stepped forward at the moment when their hopes were about to be realized, and defeated the measure. That Bill, imperfect though it may have been, had received the revision and unanimous sanction of the most competent medical and legal gentlemen of this city. No future measure of this kind will, we are persuaded, receive more earnest study and dispassionate consideration in its preparation. It may have been a fault that the street-cleaning was to be taken out of the hands of the political jobbers, and placed under the control of a non-partisan Health Board, but it certainly could not have resulted in greater inefficiency in that department. Other imperfections, whatever they may have been, could easily have been remedied by subsequent legislation. The great point to be gained was the enactment of a law reorganizing the old Health Department; that accomplished, and the progress of the city in health reform would have been uninterrupted. There would have been no retrograde steps when once the people began to see the value and enjoy the privileges of civic cleanliness and improved public health. The unfortunate failure of the Health Bill, last winter, has put far off the day when New York can rejoice in those excellent and practical health regulations which are the pride of rival commercial cities. She must now wait until by some fortuitous circumstance a citizen is elevated to the mayoralty who is capable of comprehending her real wants, and who will not allow his own ambition to thwart those beneficent measures which are necessary to her true greatness.

THE WEEK.

During the past week or two a correspondence has been carried on in the newspapers in regard to the treatment of soldiers in the Bellevue Hospital. A soldier has had his leg amputated for secondary hæmorrhage against his will, and lives to make complaint of his treatment, a result of secondary hæmorrhage not often obtainable except by amputation. He alleges that subsequently, in a clinical lecture, the surgeon stated that the leg might have been saved. Hereupon "Howard," the philanthropic friend of the patient, and who has been the chief agent in the publicity of these statements, intimates that legal steps are about to be taken against the surgeon. It is not necessary to inform the medical public that these complaints are absurd. The patients in this hospital have as much care from surgeons and attendants as in any large institution in the country.

In the death of Dr. Harsen the profession of the city has lost one of its most philanthropic and public-spirited members. He had long been identified with the dispensary system in New York, and for many years was president of the Northern Dispensary. He had recently established a prize, known as the "Harsen Prize," consisting of $100, to be awarded to the best clinical report by a member of the medical staff of the New York Hospital. Being in the enjoyment of wealth he was able to give great efficiency to his efforts in any cause in which he became interested. His disease was cerebral.

Reviews.

Variola, its Nature and Treatment. By Andrew Nebinger, M.D. Philadelphia, 1862, pp. 35.

Dr. Nebinger argues that variola is an inflammatory disease, terminating in extensive and exhausting suppuration. His method of treatment accordingly is, for the first stage, antiphlogistic, and for the second, nourishing diet and stimulants. The following is his plan:—

> "My practice has been in all cases of smallpox, during the initiatory or febrile and papular stages of the disease, to prescribe an antiphlogistic, medicinal, and dietetic treatment; but to abandon this form of treatment as soon as the papules begin to take upon themselves the vesicular form, and then commence a treatment which, in all its essentials, shall be supporting. In carrying out this treatment, I have not found any diet so useful, so grateful to the patient, or any which gave as little inconvenience to swallow when the mouth, fauces, and throat were studded with pustules, as a combination of eggs, milk, sugar, and ice, made in the proportion of one egg well beaten—half a pint of milk, sugar and ice in quantities suited to the taste and desire of the patient. When the necessity for stimuli has existed, as it does in all cases of the confluent variety of smallpox, I have

added brandy, or what I think better, Monongahela whiskey, because for purity it can be more safely relied on, and can be more readily obtained. The quantity of this diet which I direct the patient to use in confluent smallpox is half a pint, or a tumblerful, with a large tablespoonful, or half an ounce, of Monongahela whiskey added to it, every two hours or every hour and a half *during the day and night.* I have frequently had patients to take as many as twelve eggs, three quarts of good new milk, and eight ounces of whiskey daily for several consecutive days —and yet, with all this supporting and stimulating diet, this most excellent proteine or highly nitrogenized food, these poor ellows barely escaped sinking into the grave, some of them having had (notwithstanding they were so vigorously supported with food, and so actively stimulated) that peculiar feebleness and tremor which is always the unmistakable evidence of a breaking up of the vital forces—the threatenings of dissolution."

The views of the author in regard to the nature of variola, and the treatment which he has based upon them, are in accordance with modern pathology and rational therapeutics. There is no doubt that this treatment, if judiciously followed, would save a larger percentage of cases of small-pox. A year or two since it was practically tested at the Small-Pox Hospital, Blackwell's Island, N. Y., and nearly every uncomplicated case recovered. The author has done the profession a good service in bringing the subject forward in his ably written paper.

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1. PHYSICIAN'S HAND-BOOK OF PRACTICE FOR 1863, by WILLIAM ELMER, M.D. New York: W. A. Townsend.
2. THE PHYSICIAN'S POCKET MEMORANDUM FOR 1863, by C. H. CLEAVELAND, M.D. Cincinnati: Bradley & Wells.
3. DENTIST'S MEMORANDUM, by the same author.
4. PHYSICIAN'S VISITING LIST FOR 1863. Philadelphia: Lindsay & Blakiston.

THESE little works are all too well known to the profession to require any extended notice. It is sufficient to say in regard to the HAND-BOOK OF PRACTICE, that it contains its usual amount of information on the classification of diseases, weights and measures, abbreviations, list of remedies, incompatibles, prescriptions, poisons and antidotes, etc., together with ample space for the daily record of practice, bills and accounts, obstetric record, wants, and general memoranda.

THE PHYSICIAN'S MEMORANDUM contains a list of medicines and their classification, abbreviations, directions in regard to accidents and emergencies, poisons and antidotes, port-mortems, etc., with space for the memoranda of practice. As a book of engagements, it lacks the completeness of the admirable little work of Lindsay & Blakiston.

THE DENTIST'S MEMORANDUM contains every thing necessary to render the work admirably adapted to the purpose for which it is intended. We look in vain for a diary so well supplying the wants of the medical profession.

THE PHYSICIAN'S VISITING LIST is the pioneer in this enterprise, and is perhaps the best work of the kind published. We have yet to see the diary that in all respects meets the requirements of the medical profession. While some contain much that is not essential, and are thereby rendered too bulky for the pocket, others are deficient in many points that would render them highly valuable.

Correspondence.

ACCLIMATIZING OF CINCHONA PLANTS IN THE EAST.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—As several inquiries have been propounded to me respecting the results of experiments made to introduce cinchona plants into Java by the Dutch, and into Southern India by the English, I solicit space in your columns for the little information that I am able to communicate.

Medical men in Holland urged upon their government, for many years, the importance of attempting the acclimatization of the cinchona into the Eastern Possessions of that country, and finally, about ten years ago, M. Hassakarl, a Javan botanist, was despatched by the Netherlands Government to the Andes, to select suitable plants for the experiment. Unfortunately, although a skilful botanist, M. Hassakarl lacked one qualification for the successful prosecution of his mission, being ignorant alike of the Spanish and Quichua languages, and was deceived by the *casarillenos* or bark collectors, and made his collection where no valuable species were found. He crossed the Andes by the road from Lima to Tarma, and descended the eastern slopes into the mountains of Vitoe, Uchubamba, and Monabamba, returning hence by Xauxa into the loftier regions of the Andes; the plants derived thence form the bulk of the plantations in Java, and are regarded as valueless. Subsequently, he obtained 400 plants of the *C. Calisaya*, which contains more of the febrifugal principles of the bark than any other species; but of the whole number only two now survive. The experiments were resumed in 1855, by another naturalist sent out from Holland with 139 cinchona plants raised from seeds in that country, more than half of which died in less than six months. The cultivation of the exotic is still prosecuted by the Dutch, but with limited success, owing, in part at least, in the opinion of successful English experimentalists, to the system pursued in Java, of planting the young cinchonas in the forest under dense shade.

British experiments have been tried in the island of Ceylon and on the adjacent continent in the neighboring hills. M. Markham, to whom was intrusted the task of introducing quinine-yielding trees into India, gives the following report, the results of the enterprise in Ceylon:

> "After two anxious years we now have all the valuable species of chinchonæ, mentioned in the second chapter, established in Southern India. The number is now increasing at the rate of several thousands every month. From the total number of 10,157 chinchona-plants must be deducted 425 of the worthless *C Pahudiana* sent from Java, leaving a total of 9,732 of valuable species on the 1st of February, with the number rapidly increasing. It is exceedingly satisfactory to compare these results with those of the Dutch cultivators in Java. After *six* years they only had (exclusive of the *C. Pahudiana*, which is quite worthless) 8,454 chinchona-plants of valuable species; whereas in rather less than *one* year Mr. McIvor has reared 9,732, without counting several hundreds which he has transmitted to Java, Calcutta, and Travancore. The Dutch have only introduced *two* good species, while we have obtained *nine*. Thus the average increase of valuable species of chinchona-plants in Java between 1854 and 1860 being at the rate of 1,409 a year, the results attained in India have been nearly seven times as great as those of the Dutch cultivators."

On the Neilgherry hills above 72,000 chinchona-plants are in flourishing condition, some permanently placed out in the plantations, others in open air nurseries or still under glass. It is believed that in two years these plants will be yielding quinine.

As there can now be no doubt of the adaptability of this invaluable tree to corresponding soils and latitudes, north and south, in the Eastern hemisphere, we may safely conclude that its cultivation may be extended into portions of Mexico and the West India Islands, more particularly into Hayti. The project that I am submitting to my countrymen of a systematic plan of acclimatizing Asiatic plants, contemplates some that pertain to Materia Medica, in which I solicit the co-operation of my medical brethren, and perhaps some of the representative leaders of the profession may consider the extension of the cultivation of cinchona an object which they may be able to promote, although the field is a foreign one.

Yours, etc., D. J. MACGOWAN, M.D.

Army Medical Intelligence.

Surgeon-General's Office,
Washington City, D.C., Dec. 31, 1862.

Sir:—Hereafter soldiers entitled to artificial limbs, and not in one of the U. S. Hospitals established for their reception, may, upon presenting proper proof to any of the following duly appointed Medical Directors, receive from them an order for the same.

Names of Medical Directors.—Surgeons A. N. MeLaren, U.S.A., Boston, Mass..; Chas. McDougall, U.S.A., New York, N. Y.; W. S. King, U.S.A., Philadelphia, Pa.; I. Simpson, U.S.A., Baltimore, Md.; R. O. Abbott, U.S.A., Washington, D.C.; L. H. Holden, U.S.A., Cincinnati, O.; J. F. Head, U.S.A., Louisville, Ky.; M. Mills, U.S.A., St. Louis, Mo.; I. B. Porter, U.S.A., Chicago, Ill.; R. H. Alexander, U.S.A., New Orleans, La.

These orders may be given, as desired in each individual case, upon any of the following manufacturers: Selpho, Bly, Palmer, Hudson, or Jewett, and the price of the limb furnished by these dealers on such orders is not to exceed fifty dollars.

Very respectfully,
Your obedient servant,
By order of the Surgeon-General.

* * *

Ass't Surgeon S. H. Horner, U.S.Vols., has been assigned to Carver Hospital, Washington.

A Board for the examination of medical officers who may be reported incompetent in the Army of the Potomac, has been convened in Washington, D. C. Surgeon George Suckley, U.S.Vols., is President of the Board.

So much of General Orders 365, current series, from the Adjutant-General's Office, as dismissed Surgeon Anawalt, 132d Pennsylvania Volunteers, has been revoked, and he is restored to his command, provided the vacancy has not been filled.

So much of Special Orders No. 359, current series, Adjutant-General's Office, as dismissed Surgeon J. N. Hoffman, 155th Pennsylvania Volunteers, has been revoked, and he is restored to his command, provided the vacancy has not been filled.

Surgeon T. P. Gibbons, U.S.Vols., has been directed to report for duty to the Medical Director at Baltimore, Md.

Leave of absence for twenty days has been granted to Surgeon G. Grant, U.S.Vols.

Dr. Brownell relieved Surgeon Jacob Bockee, U.S.Vols., in charge of the St. James Hospital at New Orleans, La., Surgeon Bockee having been transferred to the Marine Hospital, where he relieves Surgeon R. K. Browne, U.S.Vols.

Surgeon T. G. Catlin, U.S.Vols., having reported to the Assistant Surgeon-General at St. Louis, has been assigned to temporary duty at Jefferson Barracks, Mo.

Surgeon A. Wynkoop, U.S.Vols., lately in charge of the Cranch Hospital, Washington, D. C., has been assigned to duty with the 6th Army Corps.

Surgeon Rush, 101st Pennsylvania Volunteers, Chief Surgeon of Wessell's Brigade, has been directed to transfer all the sick of that Brigade from the regimental to the General Hospital, and proceed with the convalescents to Newbern, N. C.

Surgeon Chas. McCormick, U.S.A., arrived in Washington from New Orleans on the 3d inst., on the staff of General Butler.

Surgeon Robert Murray, U.S.A., lately Medical Director of General Rosecrans's Army, has arrived at Philadelphia, Pa., where he has been assigned to duty as Medical Purveyor.

Ass't Surgeon Edwin Freeman, U.S.Vols., has been placed on duty with Light Battery L 2d New York Artillery, Army of the Potomac.

Ass't Surgeon George Hammond, U.S.A., has been directed to report to the Assistant Surgeon-General at St. Louis.

Ass't Surgeon W. F. Cornick, U.S.A., to relieve Assistant Surgeon H. L. Sheldon, U.S.A., from duty at Portsmouth Grove, R. I. The latter on being relieved to proceed to West Point, and relieve Assistant Surgeon A. Hartsuff, U.S.A. The latter will then report in person to the Surgeon-General in Washington.

Ass't Surgeon M. J. Asch, U.S.A., now on duty as a member of the Army Medical Board at Philadelphia, to report for duty to the Medical Director, Army of the Potomac.

Medical Inspector J. M. Cuyler, U.S.A., to repair to Philadelphia, Pa., to relieve Surgeon E. H. Abadie, U.S.A., as President of the Medical Examining Board, and also to inspect hospitals there with special view to the discharge of disabled soldiers, according to law and orders relating thereto.

Leave of absence for (15) fifteen days, subject to the approval of Major-General Crittenden, has been granted to Surgeon Samuel D. Turney, 15th Ohio Volunteers, to enable him to appear before the Medical Board at Louisville, Ky.

Medical News.

DEATH OF JACOB HARSEN, M.D.

A special meeting of the New York Academy of Medicine was held on Saturday, Jan. 3, 1863, to take action in reference to the death of Jacob Harsen, M.D., Dr. James Anderson, President, officiating.

The President appointed Drs. J. G. Adams, Gurdon Buek, and Benj. Ogden, a committee to draft resolutions suitable to the occasion; whereupon the following resolutions were presented and duly adopted:—

Whereas, It has pleased the Great Disposer of human events, in his inscrutable Providence, to remove from us by death our late Fellow, Jacob Harsen, M.D., in the prime of life and full tide of useful labor, therefore

Resolved, That in the decease of Dr. Harsen this Academy mourns the loss of an honored Fellow, and this community of a great public benefactor. Blessed by a kind Providence with large wealth, inherited from his ancestors, he dispensed it with a liberal hand in the promotion of the great interests of science and humanity. "To raise the fallen, to succor the wounded and distressed, to minister to the neglected, to visit the forsaken, to remember the forgotten, was the peaceful and pleasant mission of his daily life." His native city will long cherish the memory of one of her most worthy sons, while the remembrance of his distinguished philanthropy, his whole-souled benevolence, his unostentatious charity, will enshrine him in the hearts of the Profession of which he was an honored member.

Resolved, That this Academy most sincerely sympathizes with his afflicted and large circle of devoted friends in this great bereavement.

Resolved, That as mourners, we will in a body attend his funeral.

Resolved, That our Secretary be requested to transmit to the relatives of the deceased a copy of these resolutions.

Signed,
J. G. Adams, M.D.
G. Buck, M.D.
B. Ogden, M.D.

New York, Jan. 3, 1863.

On motion of Dr. Greene the foregoing preamble and resolutions were ordered to be published in the American Medical Times, and the daily papers.

John H. Hinton, M.D.,
Secretary.

The Academy attended the remains of their lamented Fellow to St. Bartholomew's Church, where the Order for the Burial of the Dead was said and chanted, after which his remains were carried for final interment to Trinity Cemetery.

The following is the reply of M. Nélaton to a certain number of workmen, who offered to vote for him as deputy:—"Gentlemen, I feel much gratified at the step you have taken; but I must confess that it astonishes me as much as it does me honor. I do not see well how my knowledge of surgery can have made you imagine that I am qualified for the mission with which you wish to invest me, or how I should have suddenly become a political economist, a financier, and a legislator, because I have discovered the presence of a ball in the foot of a wounded man. If the object in view were to appoint me surgeon to the Chamber, that would be a different affair; but the business of a deputy is what I have never learnt in Hippocrates, and for which, to speak frankly, I have no taste. I am even convinced that the affairs of the country would not go on better; and that my patients, being neglected, would fare the worse. I must, therefore, while thanking you for what you have done, declare that you propose to me an honor which it is impossible for me to accept."—*Brit. Jour.*

French Litières.—Dr. Shrumpson, of Paris, points out a defect in the British mode of conveying the wounded from the field of battle: "The French make use of *cacolets* and *litières* of articulated light iron work. The *cacolets* are armchairs, and the *litières* beds, which fit into the sides of pack-saddles, and can be easily let down at the moment they are required, the animal carrying them being employed until then in the transport of camp stores, forage, etc. These *cacolets* and *litières* form part of the *matériel de guerre* of a French army, and belong to the department of the Train des Equipages Militaires."—*Brit. Jour.*

Original Lectures.

THE RELATIONS OF ALBUMINURIA TO PREGNANCY.

BEING REMARKS MADE BEFORE THE NEW YORK ACADEMY OF MEDICINE.

By GEORGE T. ELLIOT, Jr., M.D.

PROFESSOR OF OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN IN BELLEVUE HOSPITAL MEDICAL COLLEGE, PHYSICIAN TO BELLEVUE HOSPITAL AND THE LYING-IN ASYLUM, ETC.

(*Concluded from page* 15.)

In some of the cases alluded to, thus far the coexistence of fatty liver with fatty kidneys and heart has been established by microscopic examinations. Both my memoranda and my recollections of other cases in women, in males, and in children at the breast, teach me that this is by no means an unusual complication. On the contrary, when proven to exist in one organ, I am quite prepared to find that the microscope will show its existence in one or both of the others. Nor does such co-existence of fatty degeneration prove unimportant in obstetric practice. I find the complication alluded to some years ago at different times, in some of my published cases, and the opinion expressed, that often what we are content to sum up in the emphatic word "shock"—that collapse and inability to rally, seen in some cases, where they would scarcely have been anticipated—might still more frequently be traced by an autopsy to the occurrence of these degenerations.

Neither my memoranda nor my memory recall to my mind more than one well marked case of the large white kidney. The appearances of that on section are as clear in my mind as yesterday. I have always regretted that no microscopic examination was made. The history of the case presented also many points of extreme interest, which may thus be very briefly summed up.

She was a primipara; aged 28; strongly built; who came under my observation anasarcous, exhausted, suffering from diarrhœa, with her urine loaded with albumen. Diarrhœa controlled. Stimulants given, and when rallied ℥vj of blood were taken from the lumbar region with cups. She had four convulsions, with an interval of consciousness between the second and third. I dilated her uterus with the douche, and delivered one still-born child with forceps, and a second living one by version. Warmth, salines, and diaphoretics then made up the treatment. She had a good getting up, and in ten days-time was sitting by the stove, bright and happy. On the next day she had a convulsion, and never regained consciousness, though she lived for two or three days with scarcely any secretion of urine. The post-mortem was witnessed by Drs. Isaacs and Gouley.

I do not remember having met with the small contracted kidney in the autopsies of any puerperal women.

In one of my cases the autopsy of a young primipara—whose bedside I reached just after her death in puerperal convulsions—disclosed a condition of kidneys which has never been brought under my observation at any other time. She had died undelivered, and I removed a dead child by the Cæsarean section, and obtained permission to examine the uterus and kidneys alone. On inspection these kidneys were found to be about the same size and weight, but on section, one exhibited evident appearances of disease, while the other seemed healthy. The difference between them was noticed by Dr. Foster Swift, and others, and they were shown at a clinic which I then held in the College of Physicians and Surgeons. In order to test the matter still further, I sent one to Dr. Isaacs and the other to Dr. Gouley, and the report from each of these gentlemen confirmed the character of the appearances observed by the naked eye. Unfortunately these reports have not been preserved; and unfortunately I had no opportunity of examining that woman's body to determine the mode of death. The case is offered as a solitary exception to the law of parallelism, correctly stated by Prof. Flint, and as possibly explanatory in some rare cases of recovery or duration of life despite the evidences of continued advanced disease in the urine. How fortunate for us, indeed, would it be, could one kidney, remaining healthy, do the increased labor devolving on it from the disease of its fellow.

Before leaving the question connected with the pathology of this disease, I desire to express my conviction that the recurrence of albuminuria in successive pregnancies will be found to be more frequent than is generally admitted, and that the risks are greater in proportion than in primiparæ, in consequence of the greater age and greater probability of being associated with advanced renal disease.

My memoranda give me twelve cases of albuminuria in multiparæ. Of these four died during or within a few days subsequent to labor; two are now paralysed, and their fate not determined; one was safely carried through by premature labor, induced in July last, but the urine continues to present the evidences of albuminuria. In that case albumen, casts, or low specific gravity have been noticed at intervals, for three years, since the occurrence of albuminuria and puerperal convulsions in her first confinement. In one whom I saw in her first labor, in consultation with Dr. Warner, when suffering from violent puerperal convulsions, albumen reappeared in the course of the second pregnancy, and disappeared before its close by abstinence from meat and the use of Rochelle salts, and she did well in and subsequently (as yet) to her confinement. Of the four remaining cases set down as recoveries, three have passed from under my observation, but the fate of the fourth was detailed to me a day or two since, by my friend Dr. Bishop. In her case he detected albumen subsequently to her labor, and she died two years afterwards anasarcous, with albuminuria and phthisis.

Collins's cases only furnish one of convulsions in multiparæ. That woman had convulsions in her first labor, and died after the second from metro-peritonitis, dependent on laceration of vagina. Hardy and McClintock give three cases of convulsions in multiparæ and two of these had convulsions in their first confinement. Of the three cases two recovered. One however, of those who had suffered from convulsions in her first confinement, in addition to convulsions in her second, suffered from partial paralysis of left side of face and right arm, followed by mania, and then a low form of religious melancholy, which lasted six months, and required confinement in an asylum. She is reported as having recovered.

In analysing the cases of Johnston and Sinclair, I find fifteen cases of convulsions in multiparæ. Of these four mothers died. In investigating the character of the cases, it appears that of the eleven mothers who recovered, two evidently had hysterical convulsions, and one very probably, while a third presents some symptoms of possible hysteria. Including this last case, however, there remain eight, five of whom presented the favorable circumstances of convulsions coming on after labor only; while of the three who were convulsed before labor, two were only two hours in labor, and one six hours. Thus an analysis of these cases in the absence of full reports of the urine, shows that in the whole number an average mortality occurred, while the very remarkably favorable contingencies of hysteria, occurrence after labor, and very rapid labor, blessed the eleven cases which did well. Johnston and Sinclair's cases also had the benefit of anæsthesia. It is interesting to note, that in but two cases are the previous labors referred to. In one they had been natural, and in one convulsions had occurred, and this patient died from granular kidney.

Of the five reported cases of convulsions recurring in multiparæ by Samuel Merriman, two died. Lee gives seven cases of convulsions in multiparæ, of whom one died. Of the recoveries one had evidently hysterical convulsions recurring in each labor after birth. In one there was no eclampsia, as the extremities were not convulsed. Of the remaining five cases of true eclampsia, the one that died is stated to have had convulsions in her first labor, and to have died three months after her second, with tubercles in her lungs and serum in the ventricles. At that time Dr. Lee had no knowledge of the present received pathology of puerperal eclampsia.

Mad. La Chapelle records three cases of eclampsia in multiparæ, of whom two died.

I believe that paralysis will be found more frequently in multiparæ than in primiparæ. It has certainly been so in my experience. When it has occurred under my observation in primiparæ it has been fatal, excepting in one young lady who came under my care some years ago, almost blind. She had suffered puerperal convulsions, paralysis, and blindness from the presence of a clot. Time and absorption relieved the paralysis and the blindness to a sufficient extent to enable her to get about, and further improvement is hoped for.

The probabilities of albuminuria being more dangerous in them are strengthened, in my judgment, by the frequency of paralysis, in all probability caused by the fatty degeneration of the vessels of the brain, associated as that condition has been in some cases under my observation with fatty kidneys and liver.

In conclusion I may say that, gratifying as is our advance in the pathology of this subject, I believe that the next ten years will be required to settle the statistical questions involved, and I have no doubt of a diminished ratio of mortality from palliative and prophylactic treatment.

Among the results of albuminuria in pregnancy, there is probably no one more intimately related, more frequent, or more appalling than puerperal convulsions. I have memoranda of thirty-two cases.

In twenty-nine of these the conditions of the urine were noted. In twenty-six albumen was found.

Of three cases in which no albumen was found, two examinations of the urine were made before labor without result, in one primipara. The convulsions occurred during and subsequent to labor. Chloroform, wet cups to the temples, and forceps were used. Both mother and child recovered. An examination of the urine made some two months after the labor—the only other examination made—revealed a specific gravity of only 1009. It is very much more than likely that more thorough and frequent search would have detected albumen in that case.

A second case came under my observation only after her delivery by craniotomy. She was a primipara, who also did well, and the examinations were not frequently repeated.

The third was an extremely interesting case of general convulsions in a multipara, unattended with albuminuria or loss of consciousness, and referable distinctly to spinal irritation. The mother and child did well.

Indeed it is my conviction that *true puerperal eclampsia* is always associated with the disturbances of the kidney considered in this debate.

While I have frequently met with albuminuria at the time of labor and before labor, when no convulsions have occurred, my cases, which I have analysed for this paper, present but two belonging to this class.

In one of these, a primipara, the urine is described as becoming almost solid by heat and nitric acid. That patient died after delivery, by forceps, of a living child. An absolutely rigid os had resisted the douche, and was previously incised. She had no convulsions; probably they were warded off by treatment. Certainly she had amaurotic symptoms, disturbances of hearing, piteous, uncontrollable restlessness and agitations, and the post-mortem has been alluded to in these remark.

In the other the urine was noted as densely albuminous, and the patient had headache, saw sparks and flashes of light before the eyes, and complained of a very peculiar, distressing, nervous tremulous feeling. In her case there was also pain on pressure over the right kidney. Under these circumstances, I dilated the os with the douche, and delivered with the forceps, and both did well. Chloroform was also used in these two cases.

In thirty-two cases the fate of mother or child was noted.

Of the mothers, twenty-three recovered and nine died.

The fate of the child was noted in twenty-nine cases, of which seventeen were born alive, and twelve died. Of this number of deaths two were premature children, and one owed its death to pelvic deformity of the mother and craniotomy. Of those born living, two died within a week, one after two days, and the other after a week. In my opinion the fate of the last mentioned is due to imperfect nutrition, and not to the influences of the labor. In the other case I did not think the child would live so long.

In the treatment of puerperal eclampsia, it is not necessary for me to repeat the views which I had the honor to offer to the Academy on a recent occasion, regarding the use of chloroform. They have undergone no change since that time. As a prophylactic of anticipated convulsions, both in cases where they have not as yet appeared, and where we seek to prevent their recurrence, it is in my judgment invaluable.

Perhaps there is no one question more intimately connected with the general treatment of puerperal eclampsia than blood-letting. My notes state that venesection was resorted to in eleven cases, of which eight recovered and three died.

Local bloodletting (by cups in eleven cases) was employed in eight cases, of which six recovered and two died.

In contemplating venesection from my present point of view it is very evident that it has been steadily losing favor with me for some years. The more I study the pathology of these diseases, their subsequent tendency to anæmia, even to death by syncope, the more I recognise the effect of chloroform in quieting the capillary and other circulation in these cases, and in preventing renewed congestion by warding off convulsions, the less necessary does the remedy seem to me, notwithstanding the favorable statistics represented above. I dissent from the positive views on this subject recently expressed in the London Medical Times and Gazette, by that high and respected authority, Dr. Ramsbotham, and regret that the remedy was resorted to in some of my cases. Indeed for several years venesection has not been resorted to by me. Yet I do not wish to say that I may not recommend it in a certain class of very sthenic cases. It is certain that these views are not influenced by any difference in the type of convulsions observed here and in Great Britain, so far as the Hospital cases are concerned, for personal observation as well as the well known peculiar cosmopolitan character of this metropolis witness to the contrary. It is also my belief, that the tendencies of my practice are rather to diminish alike the frequency and the amount of *local* bloodletting in these cases. Perhaps those cases in which the tenderness over the kidney with blood exudation or scanty urine occurs, may always be shown to be benefited by cupping, though even in one of these occurring in a robust primipara, death occurred a few days after labor by syncope. The tendencies to cerebral extravasations are shown to be infrequent, by no means more certainly than by an analysis of the autopsies made before recognition of the pathology of true puerperal convulsions, when the brain was expected to elucidate the cause.

In cathartics, and especially the salines, steadily used, so as not, however, to weaken the patient, I have much confidence both as prophylactics, and as aiding to remove the results of simple stasis of the kidney, though I have long been very chary of calomel; nor do I at all object to diuretics, most particularly after delivery, when in so many cases you can see the beneficial effects from a natural and copious eliminative diuresis. But the diuretics should not be of the more stimulating class, and should be preceded by cupping, when renal congestion is proved or believed to exist.

Prolonged warm bathing as a prophylactic or subsequent treatment, abstinence from meat and malt liquors (in those able to dispense with them), with warm clothing, form part of my general recommendations, and I look forward with great hope to the more general use of Turkish or vapor baths as a most valuable agent; as it is, bathing or the hot air bath are the diaphoretics which I prefer. It would be very interesting to know how far tendencies to Bright's disease might be diminished in communities where such baths are generally used. Iron and tonics are pre-eminently necessary in the after treatment of many cases.

In my judgment, the prompt termination of the labor, when convulsions occur or are clearly foreshadowed, offers the best chance for mother and child. But while in many of these cases operative measures are eminently simple, and should be within the reach of all, there are many others in which only the expert should feel warranted to interfere, as he alone can know how free from risk the given operation may be in his hands. Among the many valuable results of anæsthesia there is no one more satisfactory than the fact that we can allow a patient to sleep calmly through a period of time which we would otherwise be very loth to allow, watching meanwhile the fœtal heart, and guarding both the lives intrusted to our care.

In those cases where true puerperal eclampsia occurs at term and yet before labor has commenced, I approve of watching opportunity for bringing on the labor. The sponge tent, where great restlessness or great debility exist, has been my favorite remedy, though Barnes's method now seems superior; but, wherever possible, Kiwisch's douche is my especial favorite, and I could multiply instances of its delightful results. But the stream must be steadily thrown *against and within* the os uteri, or it will not prove effectual. These remedies are equally valuable where labor coëxists with an undilatable os. It may have been a coincidence, but in the only three cases in which I have had to recommend incision of the cervix, two were terrible cases of fatal albuminuria, in one of which eclampsia occurred. One was proved to be utterly incurable by the autopsy, and the other in all probability belonged to the same category. The principal questions of treatment remaining in albuminuria (as I have no experience with the agents recommended for the special relief of blood poisoning) are the considerations of premature labor and abortion. No cases for the latter decision have come before me, and I waive it now, though recorded cases of safety to a mother, with chronic albuminuria, from successive miscarriages, are suggestive of the method; but it seems to me that premature labor demands renewed and careful attention. Excluding those cases just considered, where the term of pregnancy is reached, and the mere induction of the phenomena at a period when the ovum is ripe is involved, it appears to me that the induction of *real* premature labor is justifiable undoubtedly, and advisable probably in multiparæ where chronic albuminuria exists, or has shed its baneful influences over the previous labor; and most especially when, in despite of our best prophylactic treatment, the increasing albumen, lower specific gravity, diminished urea in the urine, advance of microscopic phenomena, or those disturbances of the nervous system now so well recognised as often the first mutterings of the storm, one or all cast their weight into the scale.

Among the great questions of pathology not yet settled, is the time which may be needed to change many of these kidney diseases from the form yet compatible with recovery to those fatal to life. Certainly it seems to me that no attentive student of these phenomena can consider without apprehension the duration of pregnancy as an element of time and danger in the case which I have just sketched. For the mother the question is already settled in my mind. Personal familiarity with the induction of premature labor in these and other cases has convinced me both of its comparative harmlessness and of its advantages to the mother; but the risks to the child require a further collection of facts for the final decision of the question.

Narcotics have always been used very sparingly by me in these cases, having given the preference to the use of anæsthetics in severe cases. But where the restlessness, insomnia, or pain, require relief, I use them cautiously, codéine or McMunn's Elixir being my choice. I have taken advantage of a hint from Dr. Graves, and used an anodyne under the pretence of an enema, and have resorted to hypodermic injection.

I have never used the mydriatics.

I have classed puerperal mania among the complications of albuminuria, but my cases do not afford me any illustrations of frequency which can at all compare with those in eclampsia.

My notes present me ten cases of puerperal mania, all occurring in primiparæ, in but one of which albumen was detected. But one of these proved fatal, and in that case there was neither albuminuria nor low specific gravity. Autopsy refused. Two other cases are noted as of a bad type, one being sent to the Bloomingale Asylum; and in a third case the strait-jacket had to be used.

My memory recalls also a case of chorea in a young primipara, occurring during lactation. All that she required was to take iron and stop nursing. She had no evidence of other trouble.

I cannot close these remarks, Mr. President, without asking the indulgence of the Academy for trespassing so greatly on their time. It has been my endeavor to present frankly, succinctly, and faithfully, my personal experience of this subject, though sacrificing much matter for brevity; nor could I close without expressing the pleasure which it has afforded me to review and recognise the assistance which has been extended to me in these observations during the last ten years by those in this city most familiar with these researches.

In one of the earliest as in one of the latest of my cases, I find myself indebted to Dr. Clark for his microscopic examinations; and the Fellows of this Academy can well understand how ungrudgingly and with what suavity of manner he has sacrificed many an hour to give me the advantage of his experience; while the names of younger gentlemen alluded to this evening will be recognised as among our most talented observers.

But there is one among them all whose loss has been most painfully recalled by this debate, whose attainments would have cast a flood of light on these intricate subjects, whose void has never been filled—the genial, kind-hearted, self-sacrificing, sympathetic Isaacs: whose knowledge was only equalled by his modesty; whose influences were like gentle dew on the growth of our scientific investigations.

There are such men as he whose lives present a peculiar charm, which, like the fragrance of crushed flowers, exhales with renewed freshness from the tomb!

Professor Magni has a new theory of glaucoma. Here is a *resumé* of his views:—The morbid process of glaucoma consists in an atrophy, primitive and progressive, of the ciliary nerves. For this affection science has as yet given us no direct remedy. Iridectomy is the best treatment of it which we have, but iridectomy merely influences the progress of the affection by removing those conditions which favor its rapid development. Although the effects of the operation are not permanent, we may consider them as lasting for a long time, on account of the slow progress of the atrophy of the ciliary nerves.—*Brit. Jour.*

New Hospital in Philadelphia.—We are happy to announce that the ordinance providing for the erection of a municipal hospital in this city has finally passed both branches of council. It provides that the Mayor shall, on or before the first day of January, appoint one person, and that the Guardians of the Poor shall appoint two, the Board of Health three, and the Inspectors of the County Prison two of their own members, at a stated meeting in December, who, with the respective Presidents of each Board, shall constitute a commission for the erection of a Municipal Hospital. The aggregate sum of forty thousand dollars is appropriated for the cost of the lot and the erection of the building.—*Med. & Surg. Rep.*

Original Communications.

THE INHALATION OF NITROUS OXIDE GAS IN SEVERE CASES OF FEVER.

By GEO. G. SHUMARD, M.D.,
SURGEON U.S.V., MEDICAL DIRECTOR, DANVILLE DISTRICT, KY.

I HAVE frequently had occasion, in the course of my medical practice, to observe the apparent great want of oxygen in the blood drawn from patients laboring under different forms of autumnal disease. Impressed with the belief that this deficiency was not merely apparent but real, and that blood thus unfavorably constituted, if not the cause of disease, could not otherwise than exercise a very prejudicial influence upon the system, I, several years ago, instituted a series of careful comparisons between healthy blood, and that drawn from patients laboring under different forms of autumnal disease; and succeeded in fully satisfying myself that such a deficiency really did exist, and that there was an excess of carbonic acid in the blood of all the cases examined. It therefore occurred to me, that if oxygen gas could by any means be artificially supplied to the circulation, it might afford a valuable remedy in the treatment of autumnal and various other forms of disease. It also occurred to me, that the best channel for administering the remedy would be that which Nature has herself established for the reception of oxygen—the lungs. I therefore resolved to try the experiment as soon as a favorable opportunity presented itself. In 1857, I was called to see a case of severe congestive chill, in which the patient, a man about thirty years of age, was cold and nearly pulseless. Active stimulants and other remedies usually employed in such cases, were freely resorted to. A small quantity of nitrous oxide gas was also prepared and administered to the patient by inhalation. Shortly afterwards the pulse increased in volume, and in about an hour from the time of the inhalation, the extremities became warm, and the patient recovered from his chill. As other remedies were here employed besides the gas, and may have exercised an important influence in relieving the patient, I concluded to await the result of other experiments before publishing the case.

Shortly after this, my duties called me to another portion of the United States, and I had no further opportunities for repeating the experiment until the 22d day of the present month.

Last summer, while acting as Medical Director at Huntsville, Alabama, I repeatedly urged the employment of the gas in the treatment of disease. The different medical officers stationed at that post were favorably impressed with the idea that it might be made a useful remedy; but from some cause or other the gas was not administered. I also requested Dr. Newman, a highly accomplished private physician, of Huntsville, to employ the remedy in such cases as he might deem favorable for its use. A number of physicians in Cincinnati were also urged, a year ago, to administer the gas in cases of disease.

On the 22d inst., a case of typhoid fever (Case No. 1) of a hopeless character was reported, from Danville General Hospital, No. 3.

As the patient was apparently dying, and could not therefore be in any way injured by the experiment, I resolved to try the effects of the gas. Asst.-Surgeon Devendorf was accordingly directed to administer it to him immediately, which he did in the presence of Asst.-Surgeons Semlere, Achele, and Simpson.

The results were so striking in character, as to impress every one present favorably with the remedy. I may here remark, that two of the medical officers present, who were at first decidedly sceptical upon the subject, upon witnessing the result of the first experiment, immediately changed their opinion and became enthusiastically in favor of the remedy. As soon as the favorable results of the gas began to exhibit themselves in Case No. 1, Asst.-Surgeons Semlere, Achele, Devendorf, Simpson, and Avery, were directed to visit the different hospitals in Danville, and after having carefully examined the worst cases of disease in each, to select such for experiments as were considered entirely hopeless.

They accordingly reported to me, Cases Nos. 2, 3, 4, 5, 6, and 7, to all of which the gas was immediately administered.

Without attempting an analysis of these cases, I will merely remark, that all the patients to whom the remedy was administered were pronounced hopeless by their attending physicians, and that their judgment in the matter was fully confirmed by that of the committee appointed to examine the cases, before the gas was inhaled; that a striking improvement was observed in every case after the gas was administered; that under its influence warmth slowly returned to the extremities, after the most powerful diffusible stimulants that could be given, had failed to produce that result; that the pulse increased in volume, and became much more natural to the touch; that the delirium which had in several of the cases existed for weeks previously, entirely subsided; that the involuntary discharges from the bowels in all but one case ceased; that several of the cases, after lying for many hours delirious or insensible, became rational and conversed with those around them; that the countenance assumed a much more natural expression; that the livid spots upon the chest and abdomen of two of the cases, changed to a light rose color, and commenced disappearing; that the patients all expressed themselves as feeling much better; that the effects of the gas were not merely temporary, but permanent; that in the four cases that have died, life was apparently prolonged many hours by the remedy; and that three out of the seven supposed fatal cases are still living, and may yet recover.

I propose to continue the experiments, and shall hereafter not confine them alone to cases that are considered hopeless.

Although it has thus far been tried in only eight cases, the results are sufficient to prove that we have in oxygen gas a remedy of surprising power, and one that bids fair to be of great service hereafter in the treatment of almost every variety of disease.

The gas was administered to all the cases in the form of nitrous oxide, which was made in the usual manner from nitrate of ammonia, by Prof. Brikford of Danville, Kentucky, and Assis. Surgeon Semlere, U. S. V. For want of better apparatus it was administered to the patients from beef bladders, which answered the purpose moderately well.

Although oxygen was employed in these cases in the form of nitrous oxide gas, I would not propose to use it so, in all cases. In choleras, and severe cases of congestive chill, I am persuaded that oxygen gas, in its pure form, or slightly diluted with atmospheric air, would be better; nor would I hesitate to give it in any form of disease in which the vital powers are depressed, since the cases recorded show that it relieves delirium and irritation, instead of producing it.

* * * * * * * *

Case I.—J. B., age about 35 years. Has been laboring under typhoid fever with its usual symptoms, for about three weeks. When examined on the 22d inst., his condition was as follows:

Patient lying upon his back, jaw depressed, eyes sunken, pupils elevated, breathing laborious, patient delirious, extremities cold, clammy, and nearly insensible to the touch; surface of chest and abdomen thickly marked with irregular shaped, dark colored spots, varying in size from that of half a dime to that of a twenty-five cent piece (petechiæ), pulse 64 per minute, small and hardly perceptible at the wrist; involuntary discharges from the bowels, teeth covered with dark sordes, tongue dry, fissured, and dark colored.

The case was pronounced hopeless, and the medical officers present were unanimous in the opinion that he could not survive longer than a few hours. Under these circumstances nitrous oxide gas was administered to him by inhalation at nine o'clock P. M. The following were the results:

First minute while breathing it, the pulse remained at 64 per minute, but a slight increase in volume was perceptible: second minute reduced to 44 per minute, volume about the same: third minute pulse 88, volume perceptibly increased; fourth minute 90, volume about the same; fifth minute 98, no change in volume; sixth minute 92, seventh and eighth minutes 90, ninth minute 84 and fuller, tenth minute 90, volume about the same, eleventh and twelfth minutes 88, full and strong, thirteenth minute 92, fourteenth, fifteenth, and sixteenth minutes 88, volume about the same: seventeenth minute 94, and full, eighteenth minute 96, nineteenth minute 98, twentieth and twenty-first minutes 96, fulness about the same. The gas was now discontinued.

At the end of the first half hour after its discontinuance the pulse was 80 per minute and full; end of the second half hour, pulse the same; end of third half hour, pulse the same, and extremities becoming warm; end of fourth half hour, condition of patient about the same; end of fifth half hour, pulse the same, extremities becoming warmer; end of sixth half hour, pulse about the same; end of seventh half hour, patient warm and rational, pulse about the same: has taken some nourishment, in the form of concentrated essence of beef; says he feels better.

At the end of four hours, the gas was again administered, the pulse remained at about 80 per minute and full, while the extremities continued warm and the patient rational.

Seven hours after the second inhalation, the pulse became weaker, and increased in frequency. The supply of gas being now exhausted, and not having the proper materials at hand for manufacturing it, we were prevented from giving it a third time, and the patient died thirty-two hours after the gas was first administered.

Nine hours after the gas was first inhaled by the patient, the petechial spots upon the surface of his chest were observed to undergo a marked change in color, becoming much lighter colored, while some of them disappeared entirely. Several of the spots upon the surface of the abdomen also became much lighter colored.

Autopsy, eleven hours after death.—Surface of chest marked with light rose colored spots; spots also upon the abdomen, but much darker in color. *Thorax.*—Pleura healthy, heart usual size, and texture firm, left ventricle empty, right ventricle filled with thin blood, posterior portion of lower lobe of right lung hepatized.

Abdomen.—Liver healthy in appearance, gall bladder distended with healthy looking bile, pancreatic gland somewhat congested, mesenteric glands indurated and dark colored, mucous surface of cæcum congested; several of the glands of Peyer ulcerated. The color of the blood in the veins of the abdomen varied greatly; in some it was dark, and in others much lighter colored.

(*To be Continued.*)

GUNSHOT WOUND OF THE HEAD.

TETANUS FOLLOWED BY DEATH.

By DE WITT C. PETERS, M.D.

ASST.-SURGEON U.S.A., IN CHARGE OF U.S. GENERAL HOSPITAL, STEUART'S MANSION, BALTIMORE, MD.

Private Christian Krall, of Company K., 130th Pa. Vol., entered this hospital, December 20th, 1862, having been transferred from one of the General Hospitals at Washington, D.C.

The patient was struck at the assault on the rebel works at Fredericksburg, Dec. 13th, 1862, by a musket ball, which caused a slight wound of the scalp, over the protuberance of the right parietal bone. He states that the concussion was but slight, not even knocking him down, or causing any disturbance of his mental faculties. The hæmorrhage, however, was excessive, and was not arrested for five hours. He walked to the rear, but was not "dressed" till other more desperate cases had received attention. On admission into this hospital, the wound looked healthy, and was discharging normal colored pus. The examining surgeon passed his finger into the wound, but could find no fracture; the bone was denuded of its periosteum, and gave evidence of having been reached, when the ball glanced; the patient did not complain of pain in the head. The wound was dressed with simple dressing; a mild cathartic was given, as his bowels were confined; and he was directed to keep quiet in his ward.

Dec. 24th.—The patient complains of sharp pain in his head; pupils natural; pulse ranging between 80 and 90. He calls attention to some stiffness about the muscles of the neck. Slight loss of motion on the left side, though no loss of sensation could be detected on examination. Nausea and vomiting are present. The temperature of the skin is natural, the tongue is coated with a white fur, the mind is clear.

Hydr. sub-mur. and opium were ordered to be administered every four hours in divided doses, the compound cups to be applied to the nape of the neck, and the dressing of the wound to be continued.

Jan. 1, 1863.—The patient is annoyed by a persistent hiccough, which was relieved by small doses of chloroform and camphor water. Towards evening his symptoms underwent a marked change, by taking on the form of general tetanus; trismus was apparent; opisthotonos and convulsive action of all the voluntary muscles were diagnostic of the alteration in his condition. The wound became extremely sensitive, while the scalp around it was considerably puffed, indicating a burrowing of the pus. At this time the pain in the head was described as being intolerable; and during the intervals of the spasmodic throes, he was obliged to give vent to his feelings by screams and groans. The spasms lasted about five minutes, and during their continuance it required the strength of three attendants to guard the man against self-injury.

A free crucial incision of the scalp was made through the injured parts, and the fresh wounds were allowed to bleed for some time unchecked, when the hæmorrhage was arrested by ordinary means. The incisions and bleeding gave almost instantaneous relief. The pain in the head abated, and the spasms did not recur until the following morning. At the time of laying the wound freely open, as stated above, the spasms occurred regularly every hour. The patient experienced so much relief from the incisions, that he fell asleep, and remained so most of the night. An exploration of the parts could detect no fracture, yet the parietal bone felt somewhat roughened, and was evidently beginning to exfoliate.

Jan 2d.—The spasmodic symptoms returned this morning with increased severity, and continued every hour during the day. At a consultation which was called, the propriety of the operation of trephining was discussed, the surgeon believing that either pus was present under the membranes of the brain, or a spicula from the inner table of the skull might be projecting into the brain, and causing these symptoms; but it was decided that the operation was inadmissible, the patient being very much prostrated, and the operation being speculative at best. Careful attention was given to the bladder, and at stated times his urine was drawn off by a catheter, as it had been retained. All dressings were removed from the wound, and poultices were ordered in their stead. The hydr. sub-mur. was now omitted, and solid opium was administered freely in hopes of bringing him under its influence, but without effect.

Jan. 3d.—There is no change in the symptoms, and the patient is rapidly failing. The opium was discontinued, and cannabis indica, in full and regular doses, was substituted, with some relief to the severity of the spasms, but none to their frequency. A curious feature of the case is, that the spasm is more severe in the left lower extremity than in any other portion of the body, and generally commences there. The poultices to the wound were continued, they still look healthy, and the mind is clear.

Jan. 4th.—The patient quietly died at nine o'clock A.M. without a convulsive motion, seeming to be entirely exhausted.

The *post-mortem* was made twenty-four hours after death. The appearance of the body was that of a person who had expired after much suffering. The scalp was laid open from ear to ear, and both parietal bones were completely exposed. At the right parietal protuberance, the bone was discolored, where the ball had struck and glanced; but there was no indentation, neither could any external signs of fracture be discovered. The "skull cap" was next removed in the usual manner, and the brain was exposed. Under the seat of the injury and beneath the *dura mater*, a film of pus was seen spread out, covering a space about one inch in diameter. The dura mater at this place seemed *bruised*, and discolored by blood; and it was argued, that it had been damaged by the force of the blow and the springing of the bone, which, by the way, was everywhere of natural thickness. The inner table of the bone had not been damaged in the least degree. The amount of pus was so small, that it could not have caused any compression of the brain, and its quantity was estimated at about one-half of a drachm. The substance of the brain at the seat of injury was not found to be perceptibly softened or diseased. The meningeal vessels were not unusually congested. The brain was carefully removed and minutely examined; but, other than the above, there was nothing abnormal discovered, save a small quantity of bloody serum in the lateral ventricles.

Remarks.—The peculiar features of the case to my mind are; first, the rarity of the occurrence of true tetanus following wounds and other injuries of the head; second, whether or not the tetanus was excited by the injury which the dura mater received, and which the examination revealed. In my opinion, trephining would have availed nothing; and in this belief I was sustained by my colleagues.

It is due to Acting Assistant-Surgeon F. F. Murdoch, of Baltimore, Md., to state that the patient was directly under his charge, and with his usual skill and assiduity he gave the sufferer every attention, and kept accurate notes of the case.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, Sept. 24, 1862.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

CHRONIC PERICARDITIS WITH GREAT DISTENSION OF PERICARDIUM.

Dr. Austin Flint presented a specimen of chronic pericarditis, which was interesting in consequence of a marked lenticular or honeycombed appearance of the false membrane. The patient was a female, 27 years of age, whom he found in his service at Bellevue Hospital which commenced on the first of last August. She had been in the hospital since January last, and had suffered for six years from attacks of asthma. Last spring she had an attack of rheumatism lasting three weeks; and since last December she has been confined to her bed. She was exceedingly anæmic, much prostrated, and with such an amount of anasarca as to be obliged to keep the sitting posture nearly the whole of the time. She also suffered a good deal from dyspnœa. On examination of the chest, there were evidences found of a distended pericardial sac, viz. increase of precordial dulness. There was pretty loud friction sound heard over all that portion which was the seat of dulness; and in addition, there was a soft endocardial murmur heard with the first sound in the region of the left nipple. The urine was loaded with albumen. The patient remained under observation two or three weeks without any material alteration in her condition. Dr. F. was disposed to see if he could not alter her condition by lessening the amount of effusion in the pericardial sac, and accordingly prescribed elaterium in one-quarter grain doses, repeated at sufficient intervals not to produce hypercatharsis. Though the remedy had not acted violently, he was disposed to think that it had hastened the fatal result. She sank and died two or three days after. After death, the pericardial sac was found much distended, containing about twenty or thirty ounces of turbid serum mixed with flocculi of lymph. The lung was somewhat emphysematous. The kidneys were reduced in volume and weight. It was exceedingly questionable whether pericarditis occurred in connexion with the rheumatism last spring or the disease of the kidney.

PUNCTURE OF PERICARDIAL SAC IN SUBACUTE PERICARDITIS.

In answer to a question from Dr. Sayre as to the practicability of puncturing the pericardial sac, he stated that there were a few instances on record where such an operation had been resorted to. His belief was, that in this instance puncture would have been preferable to the indirect means which were adopted. He had never seen the operation performed but with the small double suction pump; he thought it would be safe.

Dr. Krackowizer knew of a case upon which such an operation was performed by Prof. Schon, of Vienna. When the trocar was inserted there was no flow of liquid; but after the instrument was plunged one intercostal space deeper a large quantity of serum escaped, and the immediate relief was very great The patient recovered very completely, so as to live a few months afterwards. She, however, never left the hospital, but died from cancerous disease of the mediastinum. It was into this cancerous mass that the trocar was first plunged. He knew of another similar operation performed by Dr. Haeger of the same city, but had not heard of its ultimate result.

OLD FRACTURE OF TIBIA AND FIBULA.

Dr. Sands presented a specimen of the bones of the leg, for which he was indebted to Dr. Jennings, of Nova Scotia. The patient, aged fifteen years, was seen by Dr. Jennings about a year ago; when about four years of age he received an injury of the left leg, resulting in fracture of both bones at the junction of the middle and lower thirds. No surgical treatment was obtained for it, and it was only when ulcerations appeared over certain projecting points that any advice was sought for. On examination of the parts a very striking deformity presented itself. The lower fragments had been tilted backwards, so to present a very considerable angle to the parts above. Over the projecting points in front there was not only ulceration of the soft parts, but at one spot the periosteum was destroyed, exposing carious bone underneath. The foot was bent very strongly on the lower fragment, and the whole of that portion of the limb had withered, the left foot being only half the size of its fellow. It was at first thought by Dr. Jennings, in consequence of the mobility that existed, that the case was one of ununited fracture, but an operation for its cure was considered impracticable, for the reasons that the soft parts over the projecting points were ulcerated, and that the boy was in a feeble and cachectic state. Amputation was therefore decided upon, and the patient recovered from the operation. On examination of the limb afterwards, bony union was found to have taken place in rather a singular manner. The two broken bones were not united to each other by their extremities, but both of the two upper fragments were joined to the upper portions of the sides of the lower fragment. The lower portion of the fibula formed almost a perfect right angle with its upper portion, while the tibia thus united presented an angle of about 120 degrees. At the point of union the bone was very compact, all the cancellous structure having disappeared. There was no evidence of any callus surrounding the edges of the fragment. The union of parts in such a remarkable position was accounted for by the readiness with which broken bones unite in young subjects.

Dr. Finnell stated, that some years ago he presented a fracture of the lower extremity of leg, near the ankle joint, which occurred to the patient when she was seven or eight years of age. The limb was left to itself for a long time, and as a consequence the muscles of the leg contracted, drawing up the foot and lower fragments almost at a right angle with the parts above. The bones of the foot were so atrophied, that by holding them up to the light they could be seen through.

Dr. Finnell related the following history of a post-mortem examination which he had made in order to get the opinion of the Society upon it as to the cause of death.

The patient was a gentleman, forty years of age, who had been subjected to a great deal of mental anxiety. About a week before his death, not feeling well, complaining of a feeling of oppression about his chest, he stayed home from business. His physician found nothing wrong about him but a quick and feeble pulse, it being about 120 per minute. No diagnosis was made. Dr. Drake was then called in, who was likewise unable to come to any conclusion as to the nature of the disease. The patient kept to his bed, refused to take food, and complained of an occasional pain about the heart. He would have very little fever, but in the evening would perspire considerably. He gradually became more and more feeble, and died at the end of the week. On post-mortem examination nothing abnormal was found save an intense redness of the lining membrane of the left auricle and ventricle extending about an inch and a half into the aorta. The endocardium of the right side of the heart was slightly reddened. Dr. F. was disposed to look upon the case as one of acute endocarditis, terminating in death without effusion of membrane.

Dr. Flint thought that the redness was due to post-mortem staining. He could not understand why we should have endocarditis without effusion of lymph.

Dr. Krackowizer remarked that if it were a case of arteritis the redness would not be so reliable as the thickening of the walls of the vessel.

BLIGHTED OVUM.

Dr. Connolly presented a growth which was expelled from the uterus of a married woman aged twenty-eight years. Three years ago she gave birth to a healthy living child at the full term of pregnancy. Since that time she has had three miscarriages, the last one of which took place about twelve months ago, and was attended with considerable hæmorrhage, which very materially impaired her health for the time being. About the middle of February last her catamenia ceased, and she believed herself to be again pregnant. When the period of quickening arrived she was somewhat at a loss to account for the absence of the usual train of symptoms which manifest themselves at that stage of gestation. Her health continued to improve, her appetite was better than usual, and she daily increased in flesh. In the fourth of the present month she was seized with very severe expulsive labor pains, which were attended with a slight discharge of blood. I was sent for, and on my arrival I found this mass lying loose in the vagina, which I at once removed. The pains had entirely ceased, and the woman was quite comfortable. The hæmorrhage was very moderate in quantity. I found the uterus firmly contracted, and the *os tincæ* closed so as not to admit the introduction of the index finger. The tumor is ovoidal in shape—one end being a little larger than the other—of moderate consistency, and was, when first seen, about the size of a large goose-egg.

Its external aspect is somewhat rough and uneven,—especially towards its larger end—looking very much like the shaggy chorion. Its internal surface presents a reticulated or honeycombed appearance; the interstices, before its immersion in alcohol, being filled up with numerous semi-transparent sacs, containing a glairy gelatinous fluid. These little vesicular bodies varied in size from that of a millet seed to a large walnut.

Here and there might be noticed, while the specimen was fresh, small clots of extravasated blood throughout the whole substance of the mass.

I am disposed to look upon the growth as the result of a blighted ovum, although no trace of a fœtus was found. The specimen is interesting, inasmuch as it appears to be a combination of what is spoken of as the carneous and hydatiginous degeneration of the ovum.

The patient has had no untoward symptom—neither pain nor hæmorrhage of any account since the expulsion of the mass.

The Society then adjourned.

FOREIGN CORRESPONDENCE.

LETTER XXI.

By PROF. CHARLES A. LEE.

MINERAL WATERS OF SWITZERLAND.

Baden, Switzerland, Sept. 13, 1862.

I date the present letter from *Baden* in Switzerland, which, next to the Baths of Schintznach, near Aarau, is perhaps the most frequented watering-place in the Confederation. Both places are on the direct route from Zurich to Basle by railway. As I have made it a point while travelling in this country, to visit its principal mineral springs, and to examine to some extent their medicinal properties, I shall very briefly speak of some of the most important. Baden is an ancient walled town of 1800 inhabitants situated on the borders of the river Limmat, which empties the waters of the Lake of Zurich into the Rhine. It was called *Thermæ Helveticæ* by the Romans, who frequented it on account of its mineral waters. The town is built chiefly on the left bank, where the *Great Baths*, so called, are situated, which are frequented by the upper classes; while those on the opposite side are appropriated to the poorer orders. There are numerous thermal springs here, issuing from the earth on both sides of the stream; having a temperature of 122° Fah., limpid, colorless, and sparkling with bubbles of gas; having a slightly saline, sweetish, and sulphurous or hepatic taste. As it issues from the earth it has a strong sulphuretted hydrogen, or rotten egg smell, which, however, speedily disappears on coming in contact with the air. I noticed all the sides and coverings of the basins, which receive the water, were covered with sublimed and crystallized sulphur. It is impossible to ascertain the quantity of gas in a given bulk of water, as it immediately escapes into the atmosphere. I counted about twenty hotels, some of them very large, and nearly all had baths on the basement floor, for the accommodation of their boarders. The bathing rooms were generally small and plainly fitted up; some, however, especially those for the poorer classes, were sufficiently capacious to allow fifteen or twenty bathers at the same time! Among the wealthy visitors as a general rule, each has his own bath for the time he remains; but I was much pleased to find both at Baden and Schintznach, the great attention paid to the wants of the poor. At the former there are four large boarding-houses expressly for the poor, and they are thus supplied with both baths and beds, as well as the best of medical attendance, free of all expense. There are also funds provided at both places to pay for their board, and a collection is taken up every Sunday at the *table d'hôte* of the hotels for this express purpose. Only one franc and a half is charged for their maintenance per day.

There are from eight to ten thousand persons who visit these springs annually, chiefly Swiss, Germans, and French. I saw no English. The waters are used both internally and externally; indeed, the baths form a very essential part of the treatment. They are also used in the form of douche and vapor-baths, and drunk very freely. Thus employed, we are informed that symptoms of saturation of the system are soon developed, which requires evacuants and a spare diet. Cupping, with scarification, is here a favorite remedy. The operation is performed by means of horn-cups, which are exhausted of air by the mouth; and the operators are by no means expert. These waters are held in high esteem in the treatment of palsy, both of sense and motion, and as an alterant in gout, and internal organic derangement, as visceral and glandular engorgements. For cutaneous affections the waters of Schintznach are preferred, as they contain a much larger amount of sulphur. A miliary eruption is very apt to be produced by the use of these waters, which is followed by great amelioration of the disease. The place has no attractions whatever, as I observed, except a pleasant walk among trees along the bank of the river, and the old Hotel de Ville, where Prince Eugene and Marshal Villars signed in 1714 the treaty of peace which put an end to the War of Succession.

The *Baths of Schintznach*, also called *Habsburger Ball*, is the most frequented watering-place in Switzerland, as already stated. The principal buildings are the Bath House in a semicircular form, and the *Great Inn* (*Grosser-Gasthof*), whose *table d'hôte salon* is one hundred and eighty feet long, and five hundred persons may be seen seated here at once. There are three hundred and sixty beds, and one hundred and sixty baths, all exactly alike, lined with Dutch tiles. The temperature of the water is 90° Fah., and tastes strongly of sulphur, epsom, and glauber salts. The principal visitors are French and Swiss, some Germans, few if any English. The table d'hôte is three francs per day. On exposure to the air the water assumes a greenish tint, and is covered with a thin pellicle of sulphate and carbonate of lime. It contains more sulphur than any of the other Swiss mineral springs, or those of Savoy and Rhenish Germany. I found the Baden mineral water of exactly the proper temperature for a pleasant bath, but this requires the addition of water artificially heated to make it agreeable. Bathing is more relied on here than the internal use of the water. They commence by remaining in the bath from five to twenty minutes, gradually increasing the duration according to the indications. The first effects are quickening of the pulse and the respiratory movements, with reddening of the surface, which increases constantly while in the water. During the first few days, this disappears on exposure to the air; but after a while there is a fine red eruption over the whole skin; or rather at least patches of a rose color distinctly circumscribed, which soon assume a deep scarlet hue. These generally enlarge, until the whole body, except the hands and face, becomes of a uniform red color. The skin, at this stage, is shining and painful; but by degrees, the rash grows pale, the epidermis scales off, and the skin assumes its former appearance. These effects are doubtless owing to the irritant effects of the sulphur and the other mineral agents contained in the water, for no such effects follow their internal use. They are found highly efficacious in cutaneous disorders, rheumatism, and gout, but are best adapted to chronic dartrous and squamous affections, without any inflammatory complications. They are also recommended for scrofulous diseases, caries and necrosis, mercurial and syphilitic affections. Dr. Amsler, the resident physician, is a highly intelligent gentleman, and directs their application with great skill. The douche bath here is much relied on, as it is also at Baden, but the bathing rooms are so filled with sulphurous exhalations that they often give rise to slight ophthalmia. In the neighborhood of Schintznach, at Wildegq, a mineral water is obtained from an artesian well, of a saline bitter taste, containing small quantities of iodine and bromine, and which is used internally, while the former are used externally, chiefly in scrofula. From two to three glasses are drunk in the morning. There is also at Birmenstorf, near Baden, a cold, purgative mineral water, containing sulphate of magnesia, of soda and lime, which is used a good deal in Switzerland, as a laxative and alterative. I believe it is never sent out of the country.

The most remarkable watering-place in Switzerland, however, is at Ragatz, or rather the *old baths of Pfeffers*, on the railway leading from Rorschach to Coire. The bathing establishment at Ragatz is supplied with water from the hot springs of Pfeffers, conveyed in wooden pipes, 12,500 feet in length. The house is very large, not well kept, and generally overcrowded and dirty. The village, which contains about six hundred inhabitants, is situated just at the mouth of the gorge, from which the torrent Jamina issues, to join the Rhine. This new establishment at Ragatz has now supplanted the *old baths of Pfeffers*, which were situated in the above gorge, deeply sunk between the rocks, and almost subterranean. For a long time there was no way to get at the source except to be let down by ropes from the cliffs above, where the bathers passed days together, not only eating and drinking, but sleeping under hot water instead of under blankets. The temperature of the water is 98° Fah., and it contains only three grains of saline matter to the pint. The patients were, and still continue to be, almost exclusively of the lower order. Tourists, it is true, often stop here to see what is considered one of the most extraordinary spots in Switzerland; but I would as soon think of spending my days at the bottom of a deep well, as at these baths. Nothing can be more gloomy and monotonous; no room for locomotion or exercise; the sun and sky rarely if ever to be seen; the bare walls of earth dripping with water, and the air always damp and chilly from the constant currents and draughts produced by the torrent. The walls of this gorge actually approach so near as to conceal the river, and to reach the springs one has to pass through the bath-house, and thence by a bridge of planks, across the stream to the entrance, which is closed by a door. Along this gorge is a sort of shelf or scaffolding, suspended by iron stanchions, and running along a niche cut out of the side rock, which penetrates as far as the hot spring, and is the only possible way to get to it. There is a hand-rail along this frail platform, so that there is little or no danger. Only one franc is charged for permission to penetrate the infernal regions at this spot. Let those who are frightened by a dark passage beneath overhanging rocks, where the sun's rays never penetrate, where the ear is stunned by the noise of the rushing, roaring torrent, never enter this passage; which both Virgil and Dante, had they seen it, would doubtless have selected, through which to conduct their heroes to hell. After walking about a quarter of a mile along the shelf of planks, we come to the springs at the bottom of a deep cavern in the rocks, where the water is received into a reservoir about fifteen feet deep, whence it is conducted in pipes to the baths. Here were the baths formerly, right over the spring, suspended to the base of the rock, to which through the roofs the patients were le down by ropes and pulleys! *Facilis descensus Averni, se revocare gradum, hic labor hoc opus est.* It is a remarkable fact that the springs cease to flow in winter, but burst fort again in the spring, and they are said to be most copiou when the snow has fallen in great abundance. The wate has no taste or smell, and contains about as much minera matter as our Croton.

* * *

M. Pasteur, so well known for his works on molecula chemistry, and for his recent experiments concerning spon taneous generation, has been elected by the Academy o Sciences a member of the Mineralogical Section. H opponents were MM. Descloizeaux and Delesse.—*Brit. Me Jour.*

M. Bouchat tells us that he has studied meningitis b the aid of the ophthalmoscope. He discovered congestio and venous dilatations, varicosity and flexusity of vein thrombosis of veins and hæmorrhages in the retina fro rupture of vessels.

American Medical Times.

SATURDAY, JANUARY 17, 1863.

OUTSIDE INTERFERENCE IN HOSPITAL MANAGEMENT.

alluded last week to a newspaper correspondence in ard to the treatment of sick soldiers in Bellevue Hospi- Charges of mal-practice against one of the surgeons e freely made, and the general mal-treatment of ents was emphatically asserted. A patient was found neighboring hospital, formerly an inmate of Bellevue, was willing to subscribe to these charges, and forth- h the newspapers of the city gave them publicity and ency. The result has been, that the Commissioners of lic Charities have directed all the sick soldiers to be oved from the hospital. This action was taken, not ause they had the slightest confidence in these state- nts, but because the interests of this great public cha- were imperilled by the indiscreet interference of indi- ials and the representatives of benevolent societies the discipline of the hospital. Things had come to a pass that any attempt to control the insubordinate in a great measure thwarted by the undisguised sym- y with the offender of the Howards and Dorcases who ed the wards. Soldiers returning to the hospital, intox- ed, turbulent, and dangerous if allowed at large, could be placed temporarily in solitary confinement, without ng down upon the authorities the severest censures of e kind-hearted, self-constituted guardians of the "brave nders of our country." The insubordinate were the cts of their special solicitude; they brought them the test variety of "extras," and cheered them with the cest stimulants. Not content with these demonstra- s, which had long since almost completely destroyed iscipline, they have finally resorted to the public press. Commissioners, long weary with the continued dis- ance which has been created in the management of the ital by this outside interference, have now wisely lved to remove the cause, by removing the patients. leaving, the soldiers drew up a paper, of which the wing is an extract:—

> We assert that a great injustice has been done us, inas- h as the gross misrepresentations * * * have ced the Commissioners to rid the institution of soldiers gether, thus depriving us of clean, comfortable quarters, as good treatment, generally speaking, as we could ibly expect.
>
> Had the visitor been sincere in his (or her) professed pathy with us, he might at least have visited the insti- on, inquired into our situation, spoken with us, and for himself. On the contrary, he tells the public that has never been inside of the institution, and devoutly 's never to be,' thus manifesting his total ignorance of gs he professes to have a knowledge of, and betraying or her) disregard of us and our interests.
>
> The public will know, then, that the writer who has so gantly taken the liberty of using the expressive signa- of 'Howard' has our individual and utmost indigna- for what he (or she) has undertaken at our expense, le, in the meantime, we must cordially, one and all, ler our heartiest thanks and manifestations of esteem ll concerned with the institution, in appreciation of the good and kind treatment we have received at their hands. In testimony whereof we hereunto place our signatures."

Bellevue is by no means a solitary example of a hospital containing soldiers so disturbed by outside interference as to have its discipline weakened, and the general efficiency of its management seriously impaired. Wherever military hospitals have been easily accessible to the people, and especially to the female portion, they have not been exempt from the annoyance of the most indiscreet advice, and often impertinent intermeddling. Unfamiliar with hospital discipline, and especially with military subordination, the sympathizing visitors have not scrupled to express openly their condemnation of the necessary restraint imposed. But this is not the limit of the evil. Too often visitors are bold to interfere with the dietary of the hospital; they visit the wards with baskets of fruits and pastry, and, quite regardless of the nature of the disease, they distribute with liberal hands their indigestible stores. If the surgeon advise that they deposit their gifts in the store-room and leave them subject to his orders, they are offended, and protest against such interference with their charities. Baffled in the personal dispensation of their favors, they either withdraw their support from the hospital altogether, or, what is more probable and more to be deplored, relieve their indignation by newspaper attacks upon the medical officers.

We must not be understood, in these remarks, as opposing or treating lightly the contributions of the people to the wants of the sick soldier. On the contrary, we regard this collateral aid as most invaluable, and as supplemental to the supplies of Government. The brightest feature in this deplorable war will be the spontaneous and ever flowing charities of the people. But we deprecate the employment of agents who lack discretion, and who officiously interfere in matters of which they have no knowledge, to the great detriment of the soldier's best interests. In what contrast to the conduct of these busybodies appear the unobtrusive but effective labors in the hospitals of those noble and self-sacrificing philanthropists, Clement Barclay and Mrs. Harris! Under the guidance of the surgeon, and subordinate to his direction, they noiselessly dispense their benefactions where most needed, and every footstep chronicles a good deed—a favor well bestowed. Our military hospitals cannot be too frequently visited by such almoners of public charity.

THE WEEK.

In his annual message Gov. Seymour recommends the appointment of a Commissioner of Lunacy:

> "I recommend the enactment of a law authorizing the appointment of a member of the medical profession as a Commissioner of Lunacy, whose duty it shall be to examine into the condition of the insane now confined in the alms-houses, poor-houses, jails, and private lunatic asylums. The subject has been strongly urged upon the attention of previous Legislatures by the medical profession, and I am sure the humanity and propriety of the proposition is too manifest to receive any other than your favorable action."

We hope the present legislature will enact the law recommended without delay. It is simply a question of justice and humanity, and no enlightened legislator can doubt what is his duty. We have believed, and can see no reasons to change the opinion, that the Commission should consist of at least three members. No one person can discharge the responsible duties of this office.

In his annual report the Surgeon-General recommended the establishment of an institution for disabled soldiers, and accordingly a resolution has been offered in the Senate,—

> "That the Committee on Military Affairs consider the expediency of providing a suitable location, and establishing a Soldiers' Home for destitute and disabled soldiers who may have been honorably discharged from military service of the United States."

It is an important movement, which is daily becoming more and more obvious. It is stated that an effort will be made to have this *Hôpital des Invalides* located on Staten Island, New York. No more pleasant and salubrious location can be found.

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The Act enlarging the Corps of Medical Inspectors passed Congress on the 27th of December, and the President promptly made the nominations to the Senate. Among those nominated we notice the names of **Prof. F. H. Hamilton**, **Drs. Joseph K. Barnes**, **A. C. Hamlin**, and **Peter Pineo**.

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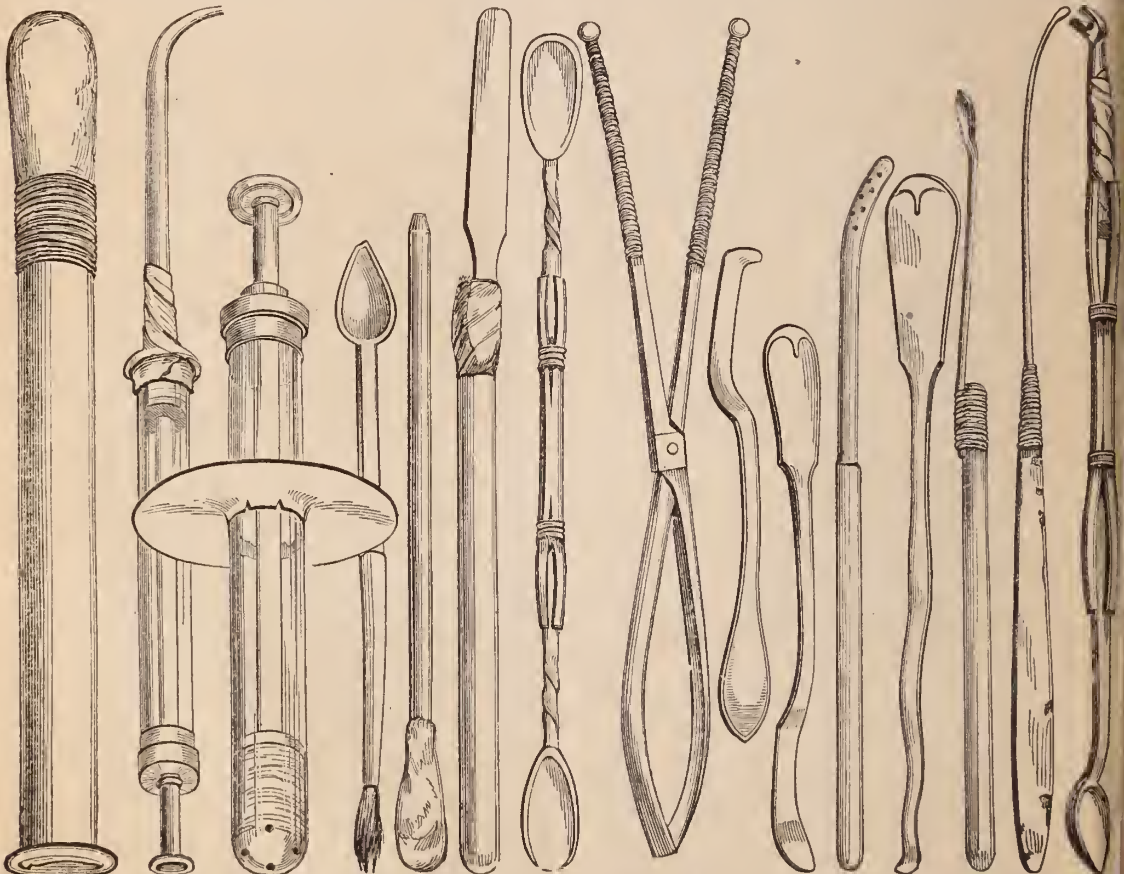
The question of the acclimatization of the Cinchona plant in the East, which **Dr. Macgowan**, the distinguished medical missionary, noticed last week, is creating considerable attention in foreign medical circles. The gradual diminution in the supply of this invaluable medical agent should excite most serious apprehensions of an ultimate complete failure to meet the wants of mankind. The belief of so experienced a person as **Dr. M.** that this plant may be acclimatized in the West Indies and Mexico should lead to efforts to practically test its truth.

Correspondence.

INSTRUMENTS OF A NOTORIOUS ABBORTIONIST.

[To the Editor of the American Medical Times.]

Sir:—The following engraving is a correct representation of a number of instruments found at the establishment of a notorious abortionist, named E. M. Browne, No. 82 Eighth Avenue. The complete collection contains forty different articles. The principal ones are here represented. They consist of spoon handles, bent in different directions to suit the operator; several penholders with wire attached; on tack hammer, with glass rod for a handle; one hair curlin tongs, altered to resemble a placenta forceps; two port crayons, holding mustard spoons; one large glass tub closed at one end with wax, and covered with cerate, con taining cowhage (mucuna pruriens); together with catheter bougies, etc. On the 27th of October, 1862, an unmarried woman, named Clementina Anderson, then between four and five months pregnant, entered this establishment to have an abortion produced. On the same day she was subjected to two operations by Dr. Browne—one in the morning, and the other in the afternoon. Great pain was caused on each occasion. On the day following she was delive On the 30th inst., puerperal fever made its appeara On the 31st she had rigors. Nov. 1st, improving. N 6th, able to sit up. Nov. 8th, getting worse. From time until the 19th inst., she gradually grew weaker, on the evening of that day she was brought home to



or's house in a carriage, and died soon after. The psy made on the 20th inst., showed that death was ed by uterine phlebitis and pyemia.

r. Browne was arrested, and committed to prison to it the action of the grand jury.

T. C. Finnell, M.D.,
Surgeon to St. Vincent's Hospital.

ELECTRO-MAGNETISM AS A REMEDY.

[To the Editor of the American Medical Times.]

:—In No. 1, of Vol. 6, I noticed a communication from M. Gonzales Echeverria upon a case of "Relapsing x paraplegia upon the application of the induced elec- current to the neck of the womb." To prevent any udice being created in the minds of the profession by apparent ill results following the application of electri- in that case, I would beg to make a few remarks on subject

well constructed electro-medical apparatus would have ished a current which is capable of "determining con- tion of the womb, and stoppage of the oozing hæmor- ge, attributed to its asthenic condition," without any ill effects as Dr. Echeverria describes. As is very evi- t to me from the method of application there described, negative pole of the induced current was applied in the vix while the positive pole was attached to the pubes. current thus entered the patient at the pubes, and le its exit at the cervix, showing its contractive power, t always does, nearest the positive pole at the pubes, irritating the cervix at the negative pole. It is very bable that irritation equally severe by any other means ld have been followed by precisely similar effects. l the application of the electrodes been the reverse, *i.e.* negative to the pubes, the positive to the os, the indica- s of the case would have been in all probability met. I ays prefer the direct current for this purpose, and ead of sending the current from the pubes to the os, ply it from the os to the sacrum, thus exciting the ire sacral plexus, and passing the current longitudinally ugh the uterus. The reason why I prefer the direct, as the Doctor calls it, the primary current, to the to and or induced current of an electro-magnetic apparatus, lies he fact that the constant change of polarity of the latter rent makes it entirely useless excepting as a local stimu- t or irritant to the integuments. Very few of the aller sizes of electro-magnetic apparatus now made, have irect or primary current of sufficient intensity to answer ny medical indications. I hope Dr. Echeverria will con- er these few remarks in the light in which they are ant, as kind suggestions from experience to protect a orite therapeutic agent, but lately recovered from obli- n, against prejudices so apt to arise from wrong impres- ns. Yours, etc.,

H. Lassing, M.D.

ew York, January 6, 1863.

Army Medical Intelligence.

INCOMPETENT MEDICAL OFFICERS.

Medical Director's Office,
Washington, Dec. 6, 1862.

[To the Editor of the American Medical Times.]

:—Your editorial remarks in the number of your jour- l for November 22d, upon the letter of several sur- ons of Boston to the Surgeon-General U.S.A., complain- of the incompetency of many medical officers now in military service, afford me a pretext for inclosing to some orders of the Medical Director of the Army of Potomac.

From these it will appear that he will do all that lies in power to elevate the standard of the Medical Depart- nt, and protect the men intrusted to his care from the ils of professional incompetency.

Since the organization of this board the movements of the army have rendered it impracticable for it to perform its functions in the field, hence the order of Dec. 5th.

There are, unquestionably, a number of officers now in this army totally incompetent, whom the action of the board, it is hoped, will remove.

It will remain, then, for those in authority to attract better men, by offering higher inducements.

The rank, pay, and emoluments are not sufficient to attract or retain the best surgical skill in the country, now so urgently needed.

Men of the highest acquirements should here find their sphere; but they cannot, in justice to their families, relinquish honorable and lucrative positions at home for the dangers and hardships of a soldier's life. There are at present in the army many surgeons of distinguished ability, sufficient to fill all the most responsible positions, whom a high sense of duty retains in the service, and who could undoubtedly benefit themselves by returning to the joys and comforts of civil life.

Offer to the military surgeon a position in the army equal to that which his ability and industry would gain in civil life, and all such complaints will cease.

Yours, etc.,

——— ———,
Assist. Surg. U.S.A.

Headquarters, Army of the Potomac,
Camp near Falmouth, Va., Dec. 18, 1862.

* * *

2. A medical board to consist of Surgeon Basil Norris, Assist. Surgeon B. A. Clements, and Assist. Surgeon W. Webster, U.S.A., will meet at these headquarters on the 26th day of December, for the examination of such medical officers of the U. S. Army as the Medical Director of this Army may direct to appear before it.

* * *

By command of Maj. Gen. Burnside.
(Signed) Lewis Richmond,
Assist. Adjt. Gen.

Headquarters, Army of the Potomac,
Camp near Sharpsburg, Oct. 5, 1862.

A Medical Board to consist of Surgeons George Suckley and Peter Pineo, U. S. Vols., and Assist. Surgeon Wm. Thompson, U.S.A., will convene for the purpose of examining such medical officers as may be ordered before it by the Medical Director.

This Board will meet at such time and place as the Medical Director may designate.

By command of Maj. Gen. McClellan.
(Signed) S. Williams,
Assist. Adjt. Gen.
Official. (Signed)
Jno. Letterman,
Med. Director.

Headquarters, Army of the Potomac,
Medical Director's Office, Dec. 5, 1862.

To Surgeons George Suckley and Peter Pineo, U.S.V., and Assist. Surgeon W. Thompson, U.S.A., Members Medical Board Examination, Army of the Potomac.

In accordance with the provisions of Special Orders No. 272, dated Headquarters, Army of the Potomac, Oct. 5, 1862, convening a board for the examination of medical officers of this Army, the board will meet in the city of Washington, at 10 o'clock A.M., on the 10th inst., for the examination of such officers as may be directed to appear before it, and whom the Board will examine.

A complete report will be sent to this office, every Monday morning, of the proceedings of the board for the previous week.

Very respectfully your ob't serv't,
(Signed)
Jonas Letterman,
Act. Med. Director.

CAPTURE OF HOLLY SPRINGS.

Medical Director's Office,
Holly Springs, Miss., December 23, 1862.

Sir:—I have the honor to report that I remained behind the advance of the army, for the purpose of establishing a large General Hospital at Holly Springs. I took a building that had been built for an armory by the Confederates, consisting of six large rooms each 250 feet long and numerous out-houses, and after two weeks of incessant labor, in which I was greatly assisted by Surgeon Powers of the 7th Missouri Infantry, I had everything prepared for 2000 patients. The acting Medical Purveyor of the southern portion of the department had been ordered to bring all his supplies to this hospital, which he did; and on the morning of the 20th of December one of the most completely furnished and extensive hospitals in the army was just ready to receive its sick. On that morning the town of Holly Springs was taken by the Confederate forces under General Van Dorn. As soon as I discovered the enemy were in possession of the place, I repaired to the head-quarters of the Rebel General near town, and made a formal request that the armory hospital should not be burnt, entering an earnest protest on the subject, as the Confederates had already set fire to the R. R. Depot and commissary store-house, and had declared their intention to destroy all houses occupied by our troops. I received the assurance of General Van Dorn's Adjutant that the armory hospital should not be burnt, but that it would be protected by a guard. Satisfied with this, I returned to my quarters, but had not been there an hour when I was informed the building was in flames, and thus this fine structure with 2000 bunks, an immense lot of drugs and surgical apparatus, thousands of blankets, sheets, and bedsacks, was soon in ashes. This proceeding, in violation of an express promise and of all the rules of civilized warfare, is an evidence of the barbarity and want of principle of Confederate officers.

But this is not all. An attempt was also made to destroy the general hospital located on the main square, and which at the time contained over 500 sick. A quantity of ordnance stores had been deposited in a building on the next block to the hospital, and by order of General Van Dorn, as stated by the Confederate officer who had charge of the matter, the barrels of powder and boxes containing shells and cartridges were taken out and piled up nearly in front of the hospital and set fire to. Two medical officers protested against this wanton act, but their requests were treated with contempt, and before there was time to move the sick the walls and windows of the hospital were riddled with flying balls and shells, and finally a terrific explosion took place which shook the entire building, destroying almost every window and door in the establishment, wounding about twenty men, and creating a scene of the wildest confusion. A large number of buildings on the public square took fire from the explosion, and it was only by the utmost efforts that the hospital was preserved as a shelter for the men from the night air.

Together with the medical officers who assisted me in carring for the sick and wounded on that trying day, I thought that the Rebels had now done us all the harm in their power, but to injury, insult was yet to be added in a manner I hope never to witness again. A rebel cavalry officer, named Brewster, who stated he had been detailed by General Van Dorn to "march off every sick man who had not been paroled," collected together, pistol in hand, about 150 sick soldiers, forced them to rise from their beds and fall in line, threatened to shoot the medical officer who expostulated with him, and actually made the poor fellows suffering from typhoid fever, pneumonia, and diarrhœa, start with him on the road. The men fell down in the street and had to rise again for fear of being shot, when they were so weak that the slightest motion was agony. On being importuned if there was anything in the name of humanity that could be done to induce him to cease his brutal proceedings, he finally consented to let them alone on receiving a paper signed by all the surgeons present stating that the men were too sick to walk, and their removal was an impossibility.

I cannot speak too highly of the conduct of Dr. E. M Powers, of the 7th Missouri Infantry, after the capture Holly Springs. The efforts of this able and accomplished officer for the care of the sick were untiring, and from morning till night he was actively engaged in doing anything that lay in his power to preserve hospital property and make the helpless beings who were driven from their beds and shelter as comfortable as circumstances would allow. Dr. Reilly, asst. surgeon of the 45th Illinois Infantry, also rendered great assistance by his well directed and efficient endeavors.

Horace R. Wirtz,
Surgeon U. S. Army,
Med. Director 13th Army Corps.

Lt. Col. John A. Rawlins,
A. A. Gen.
Gen. Grant's Head-Quarters.

AN ACT TO INCREASE THE MEDICAL INSPECTORS.

War Department, Adjutant General's Office,
Washington, January 3, 1863.

The following Act of Congress is published for the information and government of all concerned:

AN ACT to facilitate the discharge of disabled soldiers from the army, and the inspection of convalescent camps a hospitals.

Be it enacted by the Senate and House of Representati of the United States of America in Congress assembled, Tha there shall be added to the present medical corps of th army eight medical inspectors, who shall, immediately af the passage of this act, be appointed by the President, b and with the advice and consent of the Senate, witho regard to their rank when so selected, but with sole regar to qualifications, and who shall have the rank, pay, an emoluments now authorized by law to officers of that grad

Sec. 2. *And be it further enacted,* That the officers of th medical inspector's department shall be charged, in additio to the duties now assigned to them by existing laws, wi the duty of making regular and frequent inspections of a military hospitals and convalescent camps, and shall, up each such inspection, designate to the surgeon in charge such hospitals or camps all soldiers who may be, in the opinion, fit subjects for discharge from the service, on su geon's certificate of disability, or sufficiently recovered to returned to their regiments for duty, and shall see that su soldiers are discharged or so returned. And the medic inspecting officers are hereby empowered, under such reg lations as may be hereafter established, to direct the retu to duty, or the discharge from service, as the case may of all soldiers designated by them.

Approved December 27, 1862.

By order of the Secretary of War.

E. D. Townsend, *Asst.-Adjutant General.*

CHANGES, ORDERS, &c.

Ass't Surgeon R. R. Taylor, U.S.V., has relieved Assistant Surgeon H. Picot, U.S.V., from duty at the Catherine Street Hospital, Philac phia, Pa. Dr. Picot is under orders for the Army of the Potomac, bu delayed by sickness.

Surgeon. D. W Hand, U.S.V., has returned from leave of absence, resumed his duties as Medical Director at Suffolk, Va.

Surgeon E. McDonnell, U.S.V., is on duty as member of a Board the examination and discharge of disabled soldiers at Camp Convalesc Alexandria, Va.

Surgeon W. H. White, U.S.V., is on duty with the 4th Pennsylv Cavalry, Averell's Brigade, Army of the Potomac.

Surgeon James Bryan, U.S.V., is on duty in charge of the 13th St Church Hospital, Washington, D. C., the Epiphany Church having b evacuated on the 10th ult.

Leave of absence for fifteen days has been granted to Surgeon D Little, 13th New York Vols.

Ass't Surgeon Eli Small, 152d New York Vols., has been mustered of the service of the United States, to date October 15, 1862 (the dat muster in), on account of disability, there being no evidence of ser rendered by him to the Government.

So much of Special Orders 359, current series, Adjutant-General's Of as dropped from the rolls of the Army, Assistant Surgeon S. Ford Virginia Vols., has been revoked, he having been previously honor discharged by General McClellan.

Original Lectures.

LECTURES ON MILITARY SURGERY.

DELIVERED AT THE

COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.

By WILLIAM DETMOLD, M.D.

PROFESSOR OF MILITARY SURGERY AND HYGIENE.

LECTURE IV.

rial of the Dead after a Battle.—Establishment of Hospitals.—Aerial Space.—Distribution of Patients.

NTLEMEN:—We will assume now, that all your wounded
e been brought in; that you have attended to all, dress-
them and sent them off in the ambulances; still your
ors are not over. Suppose your army has been victo-
s, the enemy is flying, and you may have to join your
iment in pursuit; or your regiment keeps the field, and
wounded of the enemy which have been left behind,
y require your services, which I need not say should be
dered as cheerfully and as conscientiously as to your
n men. But even after you have dressed and cared for
wounded enemy, your time of rest may not yet have
ved.

Ve will take the case of your army being engaged in a
e, say as the allied armies before Sebastopol, and that
have just repulsed a sortie; you are likely to occupy
ground for a good while yet. Therefore, it behoves
to attend to the burial of the dead, not only your own
the enemy's dead, but even of the horses that have
n killed. For although it is not precisely the duty of
surgeon to attend to the burial, yet as a sanitary mea-
the surgeon must see to it, that the dead are buried so
ot to create disease among the survivors.

st. The trenches should be dug sufficiently deep, and
filled up too much with corpses, to allow a sufficiently
p stratum of earth to cover them. Some disinfectant
deodorizing substance, such as quicklime, sulphate of
, or the like, should be used for the trenches.

d. The place for the trenches should be so chosen that
prevailing winds do not carry the effluvia into camp.

d. Attention must be paid in the choice of the place.
the water which is used in camp does not become
ted by the putrefaction of so many dead bodies.

he neglect of these points was one of the most prolific
ces of disease which more than decimated the English
French armies in the Crimea.

n case of a disaster to the army, such as a hasty strate-
novement, change of base, or whatever else the com-
ding general may choose to call it, where the wounded
left behind, I need not say that the surgeon must re-
n with the wounded, that is, a sufficient number of sur-
s must be left behind to take care of the wounded
ch fall into the hands of the enemy.

is beginning to become an established custom no
er to make prisoners of war of the surgeons; they are
-combatants, and as they extend a helping hand to all
nded, whether friend or foe, so should their sacred call-
protect them; and wherever surgeons have been cap-
l of late they have, I believe, invariably been uncondi-
lly released.

e have now been in camp and on the march, and we
been in action on the field; it is time to follow our
nded to the hospital.

military hospital taxes the surgeon to the utmost, for
ust not only attend professionally to the patients, but
ust also be able to organize and direct the construc-
of a Hospital, and he must besides attend to its admi-
ation. Experience and statistics show that an army dur-
n active campaign requires steadily about 10 per cent.
s force in hospital accommodations; besides, the ar-
ements must be so made as to admit of a sudden in-
se of the numbers in the event of a large battle.

The best plan is, to establish three lines of Hospitals; the hospitals of the first line comprise the field hospitals for the accommodation of those who may require only a few days of hospital attendance, such as slightly wounded, and such as are only slightly indisposed, men with scabies and the like, but mainly for all the seriously wounded, especially those who will not bear transportation. These hospitals are immediately in the rear of the army. The second line embraces the general and permanent hospitals for the reception of the bulk of the sick and wounded; these hospitals must be at a convenient distance, with easy transportation from the front, water transportation if possible. The third line hospitals are still further off, and thither are sent all convalescents and chronic cases.

This arrangement gives a certain elasticity to the hospital accommodations, admitting of a rapid clearing of the first and second line to make room for the wounded when an action takes place.

In the selection of places for Field hospitals we frequently have no choice, we must take what we can find; private dwellings, churches, barns, or in default of these we may have to put up tents or shanties. Whatever it may be, bear in mind that two requisites are of paramount importance in all military hospitals, for without them neither skill nor physic will avail; these two things are fresh air and cleanliness. It is an old established principle to allow for every patient in hospital from 1000 to 1500 cubic feet of air, but that calculation does not always hold good because, for instance, in a church or other high building the volume of air in the upper part of the building is of little use, because the noxious effluvia accumulate in the lower strata; it is therefore better to be guided by surface measure, and you should allow at least 6 feet by 14 for each bed, which in a room of 12 feet height would give you 1008 cubic feet. The beds being about 3 feet wide, this gives you a space of three feet between every two beds, allowing free access to every patient.

But it is not enough to allow 1000 or 1500 cubic feet for every patient, the air must be constantly renewed. A healthy person inspires and expires per hour about 400 cubic feet of air, which volume, therefore, is no longer respirable. In a hospital this vitiation of the air is immensely increased by the exhalations from fever patients, and from suppurating wounds and other causes inseparable from the wards of a hospital. Ventilation must therefore be sufficient to supply for each patient at least 3000 cubic feet of fresh air per hour. The ventilation must be so arranged as to let the fresh air in level with the floor, otherwise the lower strata of air will remain undisturbed and noxious effluvia will accumulate.

Of late years, the science of ventilation has been carried to a high degree of perfection, and in regularly established general hospitals we should avail ourselves of the latest and best results of that science, but in temporary and field hospitals we must do the best we can. Have the windows down to the floor; if they are not, break holes in the wall level with the floor; have the windows constantly open at top and bottom, have the doors open and see that there is free circulation of air through the chimney, and do not allow on any account a close or offensive smell in the wards. Hennen used to allow the patients to smoke in the wards on condition that he should never perceive the smell of tobacco: thus, he got the men to attend to ventilation for the purpose of securing the privilege of smoking; for as a general thing the men are averse to free circulation of air. Do not allow the sheets and bedclothes to hang down and confine the air under the beds, allow no bundles of the private effects of the men under the beds or under the pillows. Exact from the hospital steward and the nurses the most scrupulous cleanliness of everything in and around the hospital, without being too lavish with water in scrubbing the floors of the wards; it causes too much dampness in the wards, which favors the development of trismus and tetanus. Have the walls and ceilings frequently whitewashed. If there are wounds with offensive discharges or gangrene in the ward, make free use of deodorizing substances, but do not employ simply aromatic fumigations, which merely conceal but do not destroy the offensive effluvia, although Baudens is much in favor of fumigations by throwing dried sage upon a pan of burning coals, a practice which he learnt from the Turks.

It is needless to go further into particulars as to what may become a nuisance in the hospital; let me again and again impress upon you to have plenty of fresh air, and to exact the most scrupulous cleanliness in every part, in and around the hospital. It is astonishing how the slightest neglect in any one particular will draw others after it, and before long you will see your Hospital changed into a Pest-house.

An important point is the distribution of the patients; whether for instance all the severely wounded should be put together in the same ward as recommended by some, or whether they should be distributed through the different wards. Although the latter arrangement may be open to some objections, yet I think it is decidedly preferable. In case there are many patients with contagious or infectious diseases (and in military Hospitals you are rarely free from typhus and typhoid fevers), is it best to separate them from the other patients and confine them to one ward, or one part of the hospital, or to scatter them among the wounded? Stromeyer prefers the latter plan, because by confining a number of such patients together in one ward you intensify the disease, and because, he says, wounded men rarely catch infectious diseases. Frequently, necessity spares you the choice, but where you can do it and the weather permits it, it is decidedly the best to separate the infectious cases—not by crowding them together in one ward, but by placing them in a number of tents outside the Hospital.

Original Communications.

THE INHALATION OF NITROUS OXIDE GAS

IN SEVERE CASES OF FEVER.

By GEO. G. SHUMARD, M.D.,
SURGEON U.S.V., MEDICAL DIRECTOR, DANVILLE DISTRICT, KY.

(*Concluded from page* 29.)

Case II.—J. C., age about 25 years, had been laboring under rubeola six days, and was then attacked with typhoid pneumonia, which continued unabated until the 23d inst., or about two weeks from the period of attack.

On Sunday, the 23d inst., he presented the following symptoms. Patient lying upon his back, jaw depressed, eyes sunken, pupils elevated, breathing short, laborious, and irregular, extremities cold, clammy, and insensible to the touch, tongue dry and fissured, bowels discharged involuntarily, pulse 144 per minute, small and hardly perceptible at the wrist; auscultation revealed the usual signs of the advanced stages of pneumonia. The gas was administered at 12 o'clock M., with the following results. Pulse at the end of second minute, 150 per minute; at the end of five minutes, 140 and fuller; end of ten minutes, 120, volume very perceptibly increased. The gas was then suspended. Patient examined thirty minutes afterwards and found conscious, pulse 110 per minute and fuller, breathing more regular, extremities becoming warm, has had no more involuntary discharge from the bowels, eyes and countenance much more natural in appearance. Patient says he feels better.

At the end of four hours the pulse was 100 per minute and full; the extremities were warm, and the patient perfectly conscious and conversed with those around him. At that time the gas was again administered, the pulse becoming under its influence somewhat stronger, while the other symptoms remained the same. Twenty-four hours after the second inhalation of the gas, the pulse became weaker and more frequent, but as the materials had not yet been received for manufacturing a second supply of gas, it was not again administered, and the patient died thirty-four hours from the time of the first inhalation.

Autopsy twenty hours after death.—Thorax.—Right lung morbidly adherent to pleura costalis; superior lobe filled with pus, and also exhibited a number of tubercular deposits; inferior lobe of left lung hepatized; a portion of the superior lobe engorged. Heart natural size, left ventricle contained coagula of blood. *Abdomen.*—Liver healthy; gall-bladder distended with healthy looking bile; mesenteric glands congested; mucous surface of ileum congested.

It was the opinion of all present, before the gas was first administered, that the patient could not survive more than a couple of hours.

Case III.—W. W., æt. 25 years. Entered Hospital No 3, October 14th. He was then laboring under the usual symptoms of typhoid fever. For the last two weeks he has been insensible, not noticing surrounding objects. On the 27th of November, the date at which the gas was first administered, he presented the following symptoms.

Patient lying upon his back; low muttering delirium; extremities cold, clammy, and insensible to the touch; jaw depressed; surface of chest and abdomen thickly marked with dark colored spots; subsultus tendinum; tongue dry, fissured, and of a dark color; teeth covered with dark sordes; involuntary discharges from the bowels; breathing short and laborious; pulse 100 per minute, irregular, small, and hardly perceptible at the wrist.

The gas was administered at 11 o'clock A.M. End of first five minutes, while inhaling it, pulse 114 per minute; end of ten minutes, 114, and increased in volume; end of fifteen minutes, 120, volume about the same; end of forty-five minutes, 79, much increased in volume and regular. Gas suspended.

At the end of four hours the patient was examined. Pulse 78, full and soft; extremities warm, patient rational.

At 6 o'clock P.M. gas again administered. Third minute pulse 85, and full; fifth minute, 90, and full. Gas suspended.

Patient examined at 10 o'clock P.M., pulse 112 and feebl other symptoms nearly the same. Gas again administered End of third minute, pulse 82, and increased in volume end of ten minutes, 66, volume about the same. Gas suspended. The dark spots upon the surface of the chest ar becoming light rose-colored, and gradually disappearing the extremities continue warm.

Patient examined at 11 o'clock the following day, No 28th: pulse, 116 per minute, and feeble; delirium retur ing. Gas again administered. At the end of five minut pulse 100 per minute, and fuller; gas suspended.

At 6 o'clock P.M. pulse quite feeble; gas again admini tered; in a few minutes pulse increased several beats p minute. Patient died at 10 o'clock P.M.

Autopsy, 12 *hours after death.*—Surface of abdom marked with light-colored spots; none visible upon the che *Thorax.*—Extensive pleuritic adhesions of old standi upon right side. Right lung healthy; lower lobe of l lung much engorged, and containing tubercles. Hea natural in size and healthy-looking. *Abdomen.*— Liver n tural; gall-bladder distended with healthy-looking bil mucous coat of small intestines softened; mesente glands congested and dark-colored externally. Glands Peyer thickened.

Case IV.—A. B. W., æt. about 25 years. Has be suffering with typhoid fever, with its usual symptoms, fourteen days. When examined on the 23d of Novemb he presented the following symptoms:—

Patient lying upon his back; extremities cold; surf of chest marked with small rose-colored spots; e sunken, pupils elevated; jaw depressed; breathing sh and laborious; tongue dry, fissured, and dark brown col patient delirious; pulse 96 per minute, small and feeble.

The gas was administered to him at 9 o'clock A.M. I of the first five minutes, while inhaling it, pulse reduced per minute; end of eight minutes, pulse the same in queney, but stronger. Gas suspended. Patient exined one hour and a half afterwards; pulse 90 per nute, and fuller; extremities becoming warm; patient re rational, says he feels better, and desires more gas; athing more regular and less laborious.

At 5 o'clock P.M., extremities warm; pulse 96 per minute l moderately full; patient rational. Gas administered. d of ten minutes, pulse 96, volume good. Gas susnded. Soon afterwards the patient took some nourishnt, in the form of concentrated essence of beef.

For the want of material for manufacturing it, the gas s not again administered to the patient until Nov. 26. that time he presented the following symptoms:

Pulse 100 per minute and feeble; breathing somewhat orious; patient rational; extremities warm. Gas adnistered at eight o'clock A.M.; at the end of ten minutes, se 96 per minute, volume increased, breathing less labous. Patient continued in very nearly the same condin until three o'clock P.M., when the gas was again adnistered. At the end of three minutes, while inhaling pulse 100 per minute, volume good; eighth minute, se 104; thirteenth minute, pulse 108; gas discontinued. Patient examined at quarter past seven o'clock P.M., se 124 per minute, and weaker; patient rational; extreies warm; rose-colored spots on surface of chest disapring.

Gas again administered. After inhaling it five minutes, se 105, volume increased; tenth minute, pulse 100 per nute, and moderately full and strong. Gas discontinued. Nov. 27, half past eleven o'clock. Patient rational and verses with those around him; says he feels better; exmities warm; has taken nourishment; pulse 100 per mie, full and moderately strong.

Gas administered; at the end of ten minutes, pulse 95 minute, and full; end of fifteen minutes, pulse 100, ume the same. Gas discontinued. Patient examined ty minutes afterwards, pulse and other symptoms about same.

At six o'clock P.M., pulse 72 per minute, and full; pant warm and rational. Gas administered. In five mies, pulse 84 per minute, and full. Gas discontinued.

At eight o'clock P.M., pulse 100, and full at half past e P.M., pulse 110, volume good; gas administered. ghth minute, while inhaling it, pulse 106, volume about same; fourteenth minute, 100 per minute. Gas susnded.

At half past eleven o'clock P.M., pulse 94 per minute, l full; patient rational; extremities warm.

Patient examined at eight o'clock the following day, v. 28. Pulse 100 per minute, patient rational, and conses cheerfully; has taken food several times during the ht.

At five o'clock P.M., pulse 96, and moderately full and ong. Gas again administered; fifth minute, while giving pulse 100 per minute, volume about the same; ninth nute, pulse 96; twentieth minute, pulse the same in frency, volume increased. Gas discontinued.

Patient examined at half past nine o'clock, Nov. 29. se 96 per minute, volume reduced. Gas administered; h minute, while giving it, pulse 92, volume increased; ntieth minute, pulse 96, volume good.

Patient examined at five o'clock P.M. Pulse the same, gue moist, extremities warm, skin slightly moist, patient ls cheerful.

Case still under treatment.

Ten o'clock P.M., Dec. 5. Patient still under treatment, dition about the same.

CASE V.—D. H., age 30 years. Has been suffering with usual symptoms of typhoid pneumonia for ten days, ing all of which time he has been delirious.

On the 27th of November he presented the following nptoms:

Patient lying upon his back, with chest elevated, breath- quick and laborious, extremities cold and clammy, forehead cold and bedewed with perspiration, eyes sunken and pupils elevated, tongue dry, fissured, and dark brown, subsultus tendinum, cough dry and frequent, pulse 98 per minute, and small. Dulness upon percussion over the right lung, no respiratory murmur perceptible on the right side, crepitation heard over greater portion of left lung.

The gas was administered to him at eleven o'clock A.M., pulse at the end of one minute, 90, second minute, 96, and somewhat fuller, tenth minute, 100, and still increasing in volume. Gas suspended.

Patient examined at three o'clock P.M., pulse 69, and volume greatly improved.

At six o'clock P.M., pulse 100, and full; skin of extremities warm and moist; breathing less laborious, patient rational, tongue becoming moist, has taken nourishment, and says he feels better.

Gas again administered; at the end of five minutes, pulse 120; end of twenty minutes, reduced to 100 per minute, full and soft.

At ten o'clock P.M., pulse 90, moderately full. Gas again administered; end of three minutes, pulse 100 per minute and full. Gas discontinued.

Patient examined at twelve o'clock; pulse eighty, and good, extremities warm and moist, says he feels better.

At half past eleven o'clock the following morning, 28th inst., pulse 106, and somewhat reduced in volume. Patient expectorates bloody mucus freely; extremities warm, patient still rational, has taken nourishment several times during the night.

Gas again administered. Tenth minute, while taking it, pulse 110, volume increased; at the end of twenty minutes pulse 104, volume good. Gas discontinued. At six o'clock P.M., pulse 94 per minute, other symptoms nearly the same. Gas administered; at the end of five minutes, pulse 100 and soft. Gas suspended.

Patient examined at eight o'clock P.M. Pulse 80 per minute, and full; extremities warm and moist; patient still expectorates bloody mucus freely; says he feels much better.

Nov. 29, twelve o'clock M. Patient improving; cough loose; still expectorates large quantities of bloody mucus, the sputa differing from that of ordinary pneumonia, in containing more blood, which varies greatly in color, some being light, and some dark colored; tongue moist; breathing less laborious; extremities warm; pulse 104 per minute, and volume good.

Gas again administered; at the end of two minutes, pulse 106; end of ten minutes, 110. Gas suspended.

Patient examined at eight o'clock P.M. Pulse full and reduced in freqnency; tongue moist; extremities warm; has taken nourishment in the form of concentrated essence of beef several times during the day; says he feels much better.

Case still under treatment.

Ten o'clock P.M., Dec. 5. Patient much better, respiratory murmur heard over every portion of left lung, no dulness upon percussion over right lung perceptible, respiratory murmur clear over superior portion of right lung; crepitation heard over the inferior lobe of the same lung. Patient's pulse good, and in other respects his condition is greatly improved. The gas has been administered to him about once in every four hours since the 29th of November, the date at which his case was first reported by me.

CASE VI.—J. W. Hospital No. 11.—Sick with typhoid fever, supervening on measles. Twenty-first day of fever; tongue dry and fissured; sordes; very restless, and delirious most of the time; pulse 96. Nov. 27, half past eleven o'clock, A.M. Administered the gas; after five minutes the pulse rose to 100, and full. Five minutes after, the same, except increased in volume. Gas discontinued. Pulse continued the same in fulness, during the afternoon, but gradually decreasing in frequency until five o'clock P.M., when it stood 74, and full. Gas administered again. After ten minutes, the pulse rose to 84, and full; twenty minutes, pulse 80, with good volume. The patient continued better for two days, after which he sank and died. The gas was not administered during the last two days, for want of material to make it.

Case VII.—L. M., aged 33 years. Admitted into hospital No. 8, Nov. 19, laboring under symptoms of typhoid fever and chronic laryngitis; constitutionally predisposed to tuberculosis. On the 26th of November, he presented the following symptoms. Extremities cold; breathing short and laborious; cough dry; eyes sunken; patient much prostrated; pulse 64 per minute, and small; has no voice.

Gas administered ten o'clock, above date. Soon after inhaling it, voice improved, the cough became looser, and the pulse 84 per minute, and fuller. In five hours, the surface became warm and moist, and the patient could speak so as to be understood. Gas administered at frequent intervals, until the 29th inst., when he presented the following symptoms. Extremities warm and moist; tongue moist; respiration more natural; voice improved; expectorates freely; pulse 85 per minute, and full. Case continued.

Since the above report was written, ten additional cases have been treated with nitrous gas, and in every one of them with beneficial results. One, a supposed fatal case of typhoid fever, is now, Nov. 5, convalescent. Another, a case of erysipelas, is greatly improved. Two other severe cases of typhoid fever are so much improved by the gas as to give reasonable hopes of recovery.

REMARKS ACCOMPANYING
QUARTERLY REPORT OF
SICKNESS OF THE ARMY OF THE GULF,
AT THE MARINE U. S. GENERAL HOSPITAL, NEW ORLEANS.

By R. K. BROWNE, M.D,
SURGEON IN CHARGE.

Sick population 2,422 (*commencing with* 1,380) *on the* 11*th of August.* 1,850 *treated;* 194 *died.*

All these cases were of Vicksburg and Lower Mississippi swamp fever and diarrhœas. In almost all, the fever was either congestive or intermittent. The troops are uniformly destitute of all notion of cleanliness of body or clothing; and have never observed any condition of health in their habits. They were utterly unmindful of all care for the hygiene of the body, and without animal spirit in anything but one notion, that of being discharged from the service. Their subordinate officers, some of them quite illiterate and ignorant, were wholly unqualified in education or character to enforce any observance of the rules of health. Their medical officers were, as a rule, alike incompetent to deal with the diseases or the men—being equally defective in scientific insight and professional force of character and discretion, or wisdom. The hospital was sought by the men as a refuge from camp duty, even when the want of energy or a shifting pain was the only infirmity of the body; men were constantly sent by them to this hospital without the recognition of the regulations, in such cases—without attempt at proper treatment, without descriptive lists—frequently in a comatose or lethargic state, and also without even a word to indicate the diagnosis which had been formed, or the treatment pursued. During the month of August many of these sent to the hospital were in the worst stages of fever and diarrhœa, and debilitated to a point beyond the possibility of reinvigoration by any medical or hygienic means.

These considerations account for the relative high percentage of deaths, indicating the antecedents of such mortality. The ratio of mortality varies greatly in given periods of twenty days, and in different wards; every precaution has been in operation to preclude new or additional causes of sickness arising from the sick themselves. From the first all cases from which any striking odor exhaled were placed in particular apartments. The worst cases of diarrhœa were placed in other rooms by themselves in twos or threes. The odor of fæcal discharge, though so frequent, as in many cases twenty or fifty times a day, was never permitted to pervade the room, a force of forty blacks under overseers being constantly employed to carry and empty the vessels. The deaths in nearly all cases were by asthenia and actual debility of long continuance. Of one hundred and twelve autopsies made by me, in but three cases was the blood of normal quality. And there was never the normal amount of blood present. During the period between the 11th of August and the 1st of November, though phthisis was diagnosed in several cases, no development of the pulmonary tissue of tuberculosis, sufficient to cause death, was ever found after death. Softening of the spleen was found in eighteen cases; abscess of left lung in one case; hepatization in four cases, and the grey hepatization of Laennec in one; congestion of the liver was found in twenty-nine cases; inflammation of the bowels in twenty-three, and perforation in two cases. In none of the cases examined were the intestines or stomach found in a healthy condition. Congestion of the brain was found in four cases, and engorgement of the cranial vessels in five cases; gangrene of the mouth and throat, a disease first found by me, in twenty-one cases; albuminous urine was found in thirty-five cases of the living, and uric acid in twenty-cases.

There was but one case of interest, diagnosed first as enteritis and afterwards peritonitis, treated to recovery with fomentation of hops, and large doses of mass. opii. Some asthenic cases which threatened a not distant death were treated to recovery by large doses of tr. cantharidis—which substance was found very efficacious as a stimulant in combination with ethers. A small number of cases of the dysenteric condition, consequent on long continued diarrhœa, in which all other remedies were ineffectual, were cured by ten gr. doses of pulv. resina communis. As a revulsive treatment in nauseant an disordered conditions of the digestive system, ipecac beginning with a strongly emetic dose, was alway efficacious. No ferruginous preparation equalled the po tassio-tartrate of iron as a tonic. Œdema of the lowe extremities, and a strongly tumid or tympanitic conditio of the abdomen, were very frequent concomitants of th diarrhœas. One case, which was cupped on the anteric aspect of the left leg without my advice, proved disastrou the whole anterior aspect of the limb from the inferior lim of the upper third to near the ancle sloughed down t the myolemma, without involving it, and though the pa tient was most assiduously attended to he eventually die No case of yellow fever, and but one of typhoid sequel occurred.

GANGRENE OF THE THROAT.

It has been found, in cases not under treatment, whi have presented themselves complaining of sore mouth, gums. In two cases of the guard it was found to invade t line of the mucous membrane of the cheek pressing agai the teeth. Here it was accompanied with slight tumefa tion of the lower part of the cheek, and soreness. The l tonsil was invaded also; surrounding the base of the teeth this side, was presented an abundant collection of epit lial and mucous matter closely resembling the light-color debris of masticated and pulverized food. The irregularit of the grinding surface of the teeth were also covered with plaster. The left tonsillar space was invaded, a the gland nearly destroyed. Again, it was found in mucous membrane of the lower lip where it adjoined lower teeth; it was curious that the continuity of the me brane affected seemed entire until the probang satura with nitrate of silver swept it, in doing which it all ca away. The denuded surface now presented the sa appearance as the others. It had previously presente mottled *bluish* look. It is an example of the *fatuous* m condition of the invalids here, that in this instance the tient would not clean his teeth and gums, though he was m *imperiously* enjoined to do so. For three succeeding days resented himself, without this having been perceptibly one, but *said* he had done it; I was obliged myself (as it vas my duty) to force him to be cleaned by my own ands. He shrank from it and closed his mouth—a puling abe. I have now under treatment three other cases vith sol. arg. nitratis; the foul and cadaverous odor and haracter of the animal *debris*, the probang wipes away, is e same in all cases. Of course, these are the appearances the living; until these were known, a careful watch aving been kept for their detection, all the knowledge I had as disclosed in autopsies, and they were discovered after eath. I scraped from this man's tongue, with a knife lade, forty-three grains of desquamated epithelium, and en washed away what when evaporated would amount as much more or perhaps sixty grains.

The conviction has been proving more fixed, that these ses are typical, and disclose the antecedents and cause of e disease. It is the *dead* and foul epithelial matter, ith the viscid mucous matter, which operates in a manner ot peculiarly dissimilar from infection. By this I do ot mean that epithelium acts as a *virus*, but only as condion preventive of healthy action, instead of which, that ing absent, we have morbid action. Seated in any open vity, these rapidly become foul as distinguished by the daverous odor. The coats of the tissues take on the deructive process, unlike, however, any other I have ever own of. The absence of acute pain or other signs of hat is termed inflammatory, is explained by the kind of sue invaded. That tissue, the mucous membrane, is epithelial, *which* of itself is never the part beginning flammatory action. It of itself tends not to inflammaon, but only to desquamation. Such is its only anatomil *rôle*. Inflammatory action always commences in other ues which only involve it, by subjecting it to the eaking down process they enact. The epithelium wherer in or on the body, with its mucous or serous coating, a kind of partition between these more active elements d the active elements of the outer world. Such has ng been our understanding of the case. It has no power throw itself off, but it is in the most immediate organic nd with these tissues on the one, and these elements on the her. It has no *power to prevent inflammation*, but only not itself the cause or occasion of it. The physical use may be either on one or the other side of it, and in ther case alike it is the tissues it closes upon which enact e destruction, their own and that of the membrane. We ow of no better rationale of the facts. The epithelium nstantly tends to be dead, that is to cease any organic nction, and is as constantly reproduced, *but it does not erefore* pass out of the world of active influences into at of pure inertia. On the contrary, like all dead matter, is infectious, and this infection is its *post-mortem* history. is giving expression to a hobby, to say, that for months e have never been without the conviction that dead epielium is the secret source of a mass of disease, as palpably miasm is. What else shall we think is truer, in accountg for gangrene of the throat and fauces?

Consider the history of the occupation of one ward in is hospital, that reserved for surgical cases being the best it. The mortality during the months of August and ptember was too great to be accountable in the eyes science without explanation. The inmates were in the ofessional care of an attentive man, who had, however, conception of hygiene or regimen. This want I in part pplied by vigilant cleanliness, but could not *supply in m* by any direction. I succeeded him in taking charge of e ward. The cases he left I caused to be first *thoroughly ansed* with soap and warm water, *and scrubbing* with a hair brush. The percentage of deaths diminished from ¼ per cent. to 5½, and the period of sickness must have en much *abridged*. The men were dismissed comparaely with *tone*, whereas before all the convalescents from at ward left the hospital with traces of sickness.

Such are the evidences, and such our conviction. But e can yet know but little of the pathology of the disease. Why, then, is it, if it be not the epithelial surfaces in which inflammation begins, that the tissues they are upon, in which it does begin, do not show some inflammatory signs besides the ravage? Whoever had the care of these cases would, without prompting, have found the explanation in the *absence* of that normal force in the vascular system upon which all healthy processes turn. In all these cases there was the most palpable diminution of the enlivening elements of the blood. The powers we attribute, in the processes of health and disease, to the blood, upon which the activity of inflammation and the occurrence of its signs turn, were decreased by so much as this diminution. The system was, in fact, too feeble to maintain its anatomical integrity where any cause of ruin existed. These inflammatory signs are but so many phenomena of this power, and *will always be in proportion* to this power. They are a process, even though of disease, and will be active (as we say) or high in degree if the processes of the body be so, and accordingly are always stronger and more marked in the healthy than in the anæmic or depleted body. This is most forcibly true of the two particulars, heat and redness. I have therefore said this disease was non-febrile and non-inflammatory. But why do I differ from the received notion of inflammation? The difference lies in my estimation of what is inflammatory. That is inflammatory in which there is an augmentation of action, either general or local, attested in some increase of signs common to health and disease; or in some *product* of such action, as fever or granulation, or an increase of material peculiar to the body; and although the one or other of the signs may be absent, as in the cold variety of abscess, the condition is still inflammatory, which is the augmented *power* of the system continued until the culminating stage.

Hence we say this disease is non-febrile and non-inflammatory, because there was no such action as this either in heat or the redness or sense of distress occasioned by such action, or which may be occasioned by the presence of any product of such action.

This disease does not arise from overcrowding, for each bed *within* doors of this hospital was allotted over 1200 cubic feet of space; and it was in the open galleries only that the patients, even when the largest number was here, reposed any closer. It was always my conviction that the commencement period of the disease was not here, but in the unutterable foulness of their persons and apparel, and in the places, camp, field, or hospitals they had previously occupied. A nimbus of foul organic matter, from the skin and breathing surface of the lungs, as a focus, the exhalations of effete and desquamated organic particles from their bodies, their clothes, bedding, and personal utensils, were the conditions supposed to account for its presence. I have never known a clean invalid, in the ordinary civil sense, to enter this hospital; nor one in whom evidences of uncleanliness were not perceptible to more than one sense. I do not here allude to "clean dirt," such as earth, or mud, or earth-dust, but to skins cadaverically foul with effete substance, to fœtid mouths and nauseating breath, to reeking feet, to hairs and beards matted with sebaceous and sweaty excretions, and to gums whence arose a stench no putrescence could exceed, evident through the nares even when the jaws were closed.

I have no facts which indicate that chewing or smoking of tobacco bore any part in the destructive process of gangrene of the throat and gums.

Of course I am assuming that the disease I am describing in the lung is the earliest form of what I have already described as found in autopsies, at first unlooked for. The difficulty of making this a surety may yet be overcome, for some of the cases now under treatment, being feeble, may die. The loss of life may be a gain of certitude on this point.

During my first paper it was said, "that these cases presented no symptoms which indicated the progress of the ravage." Of course this was simply a confession of want of knowledge of what these symptoms were, because my only knowledge was not of symptoms, but only of the ravaged parts in the dead body. And previous to their deaths the patients spoke of no signs, nor expressed any complaints which even suggested its existence, or which were not thought referable to other ailments they were treated for. It is sufficiently evident that none of these signs during life were observed or reported by the physicians. I could not attribute any *to* the disease in life. In saying, "none of them presented any inflammation of the throat, neither pain, sense of distress, nor constriction," I meant only the absence of every sign of complaint known to their attendants; nor was my attention in the living cases drawn to it by any complaint of theirs.

We might say this disease, of itself, does not *cause death*, but we have already explained that it is the enfeebled and prostrate system, the long continued absence of vigor and power, which is the *condition* privative of this disease, as that condition is the cause of, or terminates in, death; certainly it is impossible to separate this condition of the system into a *plurality* of *causes* of death, and then say a part of such plurality was *not* a cause of death. Yet the least incaution, or an inadequate amount of reflection, or insufficiency of insight, at once plunges us into absurdity in dealing with such problems.

In my first paper on this subject it was stated that the general debility was thought to be sufficient to cause death, and therefore it was not thought this *disease* caused death. This disease does not, however, exist, as we said, apart from this debility, but as inseparable from, and one with such state.

But, however our reflections may terminate, my sole present object is to furnish all the circumstances noted relating to it for their utility to others; and it is indeed solely to this end, and so early that I mention my conception of its exciting causes, and not with a design to take precedence in divining its pathology. For at this moment there are, perhaps, numerous cases of this disease, the existence of which is totally unsuspected; and now that its hitherto unaccepted existence is known, it must be speedily guarded against, proceeding in our precautions and treatment according to the dictum of such idea and theory of it as, for the time, seems the most rational. This, with a discriminating eye, was my first duty.

This estimation of the disease, influential just so far as it related to its ante-mortem character, *may* be corrected in continued and careful observation of its cause in the living subject. That no one here suspected or thought of there being a possibility of such a disease sufficiently explains the want of observance of any *signs* of it, even had they existed; for of course we cannot recognise the signs of a disease unless the disease is given as known by experience or description. If I am sustained by further observation in the opinion that I have at last discovered in the living the progress of the disease and its characters, *then* our previous estimation of it, derived from the dead only, may be either verified or modified. Had it assimilated scorbutus or any known form of ulceration it would have been recognised. The fact is the best of proofs of its originality here. I am, moreover, without any reason for doubting that the ravage I described as found in the dead, and that I find in the living, are different stages of the same disease, since the latter is as fully and peculiarly unlike any form of mouth and throat disease as the former; and to doubt their identity commits us to two equally new forms of disease.

It was without any satisfaction that I have attempted to assimilate this disease to any other form of destructive disease, whether gangrenous or not. It is in every respect unlike any of these. The relatively large proportion of cases infected with it invest it with the utmost gravity, fully as much in the arena of military surgery as any known surgical affection.

None of the living cases, now under treatment, have been long enough so to determine whether the ravage can be stayed from the moment treatment commences. When the topical application is made, it does not present the action of ulcerated flesh. It is simply "tender" when sponged. At *un*-uniform intervals minute globules of blood appear where it is sponged; and on the succeeding day it will be found to be of a pale and exanimate hue, covered with a dirty white granular debris. In all the cases the disease ran on to the death; the ruined parts were of a dusky black, like that of bruised flesh. but not so in the living cases. The difference is probably entirely post-mortem.

[NOTE.—In regard to the death by scorbutus spoken of in my first paper, it was the only case in which I permitted an autopsy to be made by any other hands. I was undoubtedly deceived. I gave the operator permission to proceed, as I was not able at that time to do so myself. He reported scorbutus, but on reflection I am thoroughly convinced it was a gross error. No case of scorbutus has either died here or been here. When I said *scorbutic appearance* in one case, I meant merely the loosening of the teeth. No other symptom had ever been present, and no case of scorbutus has been known here, and no sign of it, either before or after death, though those here who had never seen it might have named it so.]

REMARKS

ON THE QUALIFICATIONS AND DUTIES

OF THE "SURGEON IN CHARGE."

BY JAMES BRYAN, M.D.,

SURGEON, U. S. VOLS.

> "The experience of those who have the good fortune to be assigned as patients to those hospitals where the Surgeon in charge fully understands the administrative as well as the strictly surgical parts of his duties, shows that not only comfort, but even a certain approach to luxury, can be attained from the judicious application of the regular hospital incomes. When the Surgeon in charge is incompetent as a manager, or indifferent to the comfort of those under his care, or so overworked as to be obliged to neglect some of his duties, the patients suffer."
>
> DR. L. B. RUSSEL'S Report to GOV. ANDREW.

> "The man whom Heaven appoints
> To govern others, should himself first learn
> To bend his passions to the sway of reason."
>
> THOMSON.

IN an article published some months ago, I attempted to delineate the duties of the regimental surgeons in the volunteer service. I desire now to make a few remarks on the functions and duties of the "Surgeon in charge" of one or more hospitals. This officer, as suggested by Dr. Russel, should have the double qualities of administration of the secular affairs of his hospital, combined with the highest acquirements and skill in his profession. The military service is essentially a despotism, connecting personal responsibility with a central power. This is as true in the medical as in the strictly military department of the army. The symbol and seal of this authority is *rank*, and he who strikes at the rank of the medical profession aims equally at its dignity and its efficiency. The medical man, in the performance of his godlike duties, is, like any other person, influenced by the rewards and honors of his fellows. The mere consciousness of performing his duty, while at the same time he is underrated and despised, is a martyrdom, which the public seem to think peculiarly adapted to the profession. History tells us that one of the cities of Greece erected a golden statue to the memory of Hippocrates, and Homer says that

> "A wise physician skilled to heal,
> Is more than armies to the public weal."

But enough of this; the position of the Surgeon in charg is one of great responsibility, and should be intrusted only to those possessing the qualities above enumerated. Hi duties are—First, not unfrequently, to supervise the erection fitting out, and organization of his hospital. He shoul therefore be familiar with the style of architecture necessary for such a building; the laws which govern the ventilation and temperature of a hospital. He should understan the terrene and climatic causes of disease, in order to properly locate his building. He should appreciate the importance of cleanliness, and the absolute necessity of dail policing, as it is called, the premises both inside and out, the value of baths, cold, warm, hot. vapor and medicated, as a means both of cleanliness and of cure, in the treatment of his patients; the arrangement of his kitchen, laundry, dining room, clothes room, drug room, water closets, etc., etc. Lastly, in the organization of his hospital he should be able to select proper officers for the performance of the several duties of steward, drug-clerk, ward-master, nurse, cook, laundress, etc., etc. This selection to be influenced not only by the acquirements of the parties in their several departments, but by their fitness in morals and general intelligence for their several posts. They are, in fact, to be members of one family, governed by one patriarchal head, and controlled by laws, many of which are unwritten.

Secondly, the Surgeon in charge should be a well educated and experienced surgeon. The regulations denominate him exclusively "surgeon," and his duties, especially during the war, partake largely of the characteristics of a surgeon. We all know that the ordinary medical examinations of the colleges are designed to test his qualifications in the several branches taught in these institutions. The examinations for the regular army, while they extend, in addition to the above, over some of the elements of an English education, are designed also to induce him to pay special attention to branches strictly surgical, as practical and topographical anatomy, together with more or less operative surgery, etc. The Surgeon in charge should have been familiar with these elementary studies and their application to practice, long enough to have established fixed and intelligent opinions in medicine and surgery. He should have been taught in the best regular medical schools, should have practised his profession in or out of the army, and should possess sufficient intelligence to profit by these circumstances. The chief reasons for these latter qualifications are, first, that he may be able to practise his profession in his post, with credit to himself and to the best interests of his patients. Secondly, that the medical officers under his command may with confidence rely upon his judgments and decisions in the critical and dangerous cases which occur almost daily in their practice in a general hospital. To have an inexperienced, incompetent, or uneducated man, in the post of Surgeon in charge, is an outrage not only to the brave soldiers, whose lives are thus jeopardized, but an insult to the medical men, young or other, who may be placed under his command.

The Surgeon in charge should be a *gentleman*, able to command the respect of his equals and inferiors; one whose habits or manners would not be calculated to attract attention by their singularity or immorality. He should be just to the Government, generous to his subordinates, and kind to his patients. He should be patient under the discipline of the army, careful of his words, respectful to his superiors, dignified and courteous to all.

Thirdly, this post demands the exercise of administrative faculties analogous to those of a strictly military commander. The *ipse dixit* of a Surgeon in charge, is, and must be, law to all under him in the hospital. This necessarily infers a power in his hands, which, controlled by a contracted or illiberal mind, may be the means of great oppression to his officers, or patients, or both. Here, as conciliatory manners soften the asperities of absolute command, so moderation in the execution of the laws of his household will conduce to its harmony and efficiency. He should protect the weak against the strong, punish and dismiss the deceitful and dishonest, and reprove by precept and example the immoral and debased.

He should be a good accountant, and attend closely and personally to the disbursements and receipts of his household, watching every avenue of excess, and taking every opportunity to economize and increase his store—he must purchase from his hospital fund, in the cheapest markets, such articles as are best adapted to the wants of his patients.

He must be firm, and exercise his best judgment in securing furloughs and discharges for his men. True to the Government, he must be able to detect impostors and pretenders, and foil their dishonest intentions; at the same time he should lean to the side of mercy and kindness, in granting furloughs to his home-sick and chronic cases, remembering that these are his neighbors and fellow-citizens, whose sympathies and associations have been rudely sundered and harassed by this most unholy and diabolical war. He must learn, in fact, that men are not mere machines, but that the impulses of the affections, and the yearnings of the heart, influence not only the daily efficiency of the soldier, but in some cases menace his very life, by inducing debility and disease.

Lastly, the Surgeon in charge should familiarize himself by daily study with the "Rules, Regulations, and Orders" of the service. The latter, combined with "Circulars," are issued almost daily from headquarters, and are altered or expunged from time to time to meet the exigencies of the service. In this matter he will require a good memory, and the daily habit of obeying orders, whether new or old. Sometimes his communications to his superiors will be misconstrued or misunderstood, and he will receive censure without just cause. In these cases he will find it better to forget small injustices than to waste his time and energies in attempting to rectify them.

"This above all, to thine own self be true," etc., etc.

The Surgeon in charge should be the most industrious person in the hospital. Every officer and attendant should feel that the eye of the commanding officer is always upon him; and that swift punishment or reward will follow the glance of his eye (among the duties of the Surgeon in charge there is perhaps none of more importance than this). The weekly and other inspections should be made with rigor and punctuality, and every officer be made to feel that he must perform his whole duty. Another very important matter is the frequent personal visitation of the patients, either alone, or accompanied by, and in consultation with, the attending surgeons. This will give him an opportunity to watch the daily progress and results of disease, and its treatment. It will strengthen the hands of the medical attendants, secure justice to the patients, and instruct the Surgeon in charge as to the fidelity and capability of his medical corps. Rational consultations, and the frank interchange of opinions and ideas, will conduce to the interests of science and the harmony of the profession.

Strict military and professional etiquette should be observed by the Surgeon in charge in all his intercourse with his medical officers. All differences of opinion should be kept from the ear of the patient; all unnecessary changes in the prescriptions should be avoided.

Such are a few of the axioms connected with the Surgeon in charge.

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The London *Law Times* has the following, on a trial in which a medical man was fined for having, as was alleged, caused rupture of the perineum in a case of labor. "Here, too, is another instance of the inefficiency of juries for the trial of civil disputes. Twelve men, *utterly ignorant* of the first principles of physiology, and more than ignorant, because filled with the most erroneous notions on the subject, are set to determine, whether a man who has studied the science for a lifetime, has rightly or wrongly applied it. True, they are supposed to be informed as to this by witnesses who are themselves *experts;* but in practice the experts on either side flatly contradict each other, and the ignorant jury must judge between them. This is a mockery of justice, discreditable alike to science and to law, and should be prevented, as it may be, by simply permitting the fact of admission to the profession to be conclusive evidence of competency in a medical man, limiting his liability for misconduct to negligence in the exercise of his skill, to be sustained by proof, actual *misconduct*, or positive *neglect*."

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, Sept. 24, 1862.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

ULCERATION OF VERMIFORM PROCESS BY GALL-STONE.

Dr. Conant exhibited a small biliary calculus, and gave the following history. On the evening of the 7th of August he was called to see a patient in Brooklyn, who the day before was attacked with what was supposed to be colic, and had obtained no relief from domestic remedies. The pulse was about 80 per minute, the pain was very severe, and was attended with tenderness over the epigastrium. Morphine was administered, and, although two grains had been taken up to midnight, immediate relief was only obtained by the inhalation of chloroform. After this the morphine acted so that the patient was enabled to pass the rest of the night and most of the following day (Thursday) in a tolerably comfortable condition. In the evening, however, Dr. Hill, who resided in the neighborhood, was called in, and found the patient commencing to sink, and he directed the use of stimulants and a continuance of beef-tea. On Friday the symptoms began to grow alarming, there being still considerable pain in the epigastrium. On Saturday there were symptoms of collapse; on Sunday the patient was in a semi-comatose condition; then becoming completely comatose, gradually sank until five o'clock Monday afternoon, when he died. It was the opinion of Drs. Conant and Hill that death was caused by peritonitis, but as there was no particular spot where tenderness was most marked, they were unable to refer it to any precise starting-point. During the whole illness of the patient no peristaltic action of the bowels could be induced. There was no trouble with the urine. On post-mortem examination the peritonitis was discovered to have had its origin in the ulceration of the appendix vermiformis, caused by what appeared to be a gall-stone covered with inspissated mucus. No chemical or microscopic examination of it was made.

Dr. C. stated that he had presented on previous occasions four or five cases of perforation of the appendix vermiformis. One of these accidents occurred to a medical student, a bean lodging in the process. The pain in this instance was localized. Death occurred from hæmorrhage, the result of an ulceration of one of the branches of the ilio-lumbar artery. A second death by the same means occurred to a Methodist minister, who had eaten the beans on Friday and was taken sick the following Monday. In the case of the medical student the particular article of food was taken on a Friday, and the trouble likewise commenced the second day after. A third case that had been reported was that of a sailor who was admitted into the Marine Hospital with a severe attack of peritonitis, which, however, subsided, when, ten months subsequently, a second attack proved fatal. On post-mortem examination it was shown that the foreign body had caused the first attack, and had remained during all that interval in the appendix vermiformis without causing any trouble. The old adhesions were very firm and tough.

Dr. Elliot asked if the urine had been examined, inasmuch as he thought it was very unusual for coma to precede death in such cases.

Dr. Conant stated that there had never been any trouble with the urine, and was disposed to think that the coma was due to the absorption of poison from the peritonitis.

Dr. Elliot, in further remarking upon the case, thought it afforded an illustration of the fact that the pain is not always confined to one particular locality. In regard to the time in which foreign bodies remained in the vermiform process, he had a very interesting case in a boy, six or seven years of age, who died of perforation. After death the foreign matter, which was partly within and partly without the ulceration, was carefully examined by Dr. Clark, when its nucleus was found to be a strawberry seed, around which had accumulated successive layers of fæcal matter, in which were found portions of the pericarp of wheat, and other materials. It was positively known in this instance that the child had not partaken of any strawberries, either fresh or preserved, since the season before, death taking place the following March.

Dr. Krackowizer related a case which had come under his observation, of a man who, a year ago last summer, was first attacked with general abdominal peritonitis, starting from the right iliac region. An abscess formed in this locality, opened, and healed. From the latter end of November until the end of the following February there were six or seven similar attacks, which, as in the first instance, could not be referred to any apparent cause. The disease was always amenable to opium. At the last attack an abscess again formed in the right iliac region. This was opened, discharging a considerable amount of matter. On probing the wound with the finger, the abscess was found to extend no deeper than between the external and internal oblique muscles. One morning, on removing the dressings, the patient's attention was attracted by the falling of some hard substance into the basin. On examining it afterwards it was found to consist of an entrolite, covered over with a whitish material. The abscess healed rapidly after this, and the patient has never suffered from a subsequent attack.

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FOREIGN CORRESPONDENCE.

LETTER XXII.

By PROF. CHARLES A. LEE.

MINERAL WATERS OF SWITZERLAND.

Baden, Switzerland, Sept. 13, 1862.

It is not my purpose to describe the natural scenery of this region, which is certainly very striking, and would require some pages to do it justice. As to the medical properties of the water, independent of the temperature, I much doubt whether it can truly be said to possess any whatever. The imagination probably has a good deal to do with its supposed effects. It is used externally and internally. Like our Saratoga waters, ten or twelve glasses are taken in the morning, besides more or less at meals. It is drunk cold, and is said to produce insomnia, like coffee. From half an hour to an hour is the duration of a bath, and two per day are taken; no eruption is produced by the baths, which produce very agreeable sensations, like warm baths generally: calmative without debilitating. A large number of nervous affections are annually treated at Pfeffers, such as disorders of the sensibility, tic douloureux, chorea, spasmodic contractions, headache, disordered menstruation, sciatica, and disorders connected with disease of the spinal cord. Some have compared their action to that of the waters of Wildbad and Gastein, but we shall hereafter show that there is little if any analogy between them. Some physicians regard them as almost specific in gastralgia and chronic catarrh of the bladder, even when there are purulent deposits in the urine, with painful micturition. The rapidity with which this, like all other pure water, is absorbed and eliminated doubtless produces an irrigation of the mucous membrane which exerts a favorable influence over its secretions and sensibility. The baths at Ragatz only differ from those of Pfeffers in having lost some degrees of temperature in their passage through the wooden pipes.

The *hot saline waters of Leuk* deserve a very prominent place among the mineral waters of Switzerland. The *Baths of Leuk* (*Leukerbad, Loeche*), are most romantically situated in a deep valley or gorge, fronting the famous chain of the Gemmi. They are approached from Sion, in the valley of the Rhone, through which the railway from Geneva passes. The springs are very numerous, and the body of water discharged is estimated at ten million litres every twenty-four hours. The temperature is 122° Fah.

The water is perfectly limpid, without smell, and a very slightly bitter astringent taste. Its mineral ingredients are *sulphate of lime, sulphate of soda and magnesia, carb. of iron,* and traces of other salts. It is also said to contain arsenic. The water is chiefly employed for baths, very little being drunk. The baths consist of five or six lodging-houses, connected with a village of 300 inhabitants, and situated 4,500 feet above the level of the sea. The situation is dreary, the climate bad, the accommodations poor; and yet they attract large numbers of visitors during the summer months, especially Swiss and French. The baths are large square reservoirs, about four feet deep, and capable of accommodating from thirty to forty persons at once. The want of private baths, and the necessity of prevènting the ennui of such an amphibious existence if passed in solitude, has led to the practice of bathing in common. The principal bath-house is a large shed, divided into four compartments or baths, each about twenty feet square, and capable of holding from thirty to forty persons. To each of these baths there are two entrances communicating with dressing rooms, one for ladies, the other for gentlemen. A gallery runs along the partitions dividing the baths, into which any one is admitted, either to look on or converse with the bathers below. As the water is too hot for a bath, it is allowed to remain in the receptacles over night to cool. About four or five o'clock in the morning the bathers begin to assemble. Clothed in long woollen gowns they descend into the water, and it is rather a strange sight to see thirty or forty heads emerging from the water, of both sexes and all ages, while there are floating about on the surface wooden tables holding coffee, cups, newspapers, books, chess and backgammon boards, cards, dice, and other aids, to enable the bathers to pass away the hours they are advised to remain in the water, which is eight hours a day—four before breakfast and four after dinner. Here may be seen young ladies, burly friars, invalid officers and soldiers, ancient dames, young gentlemen, children, monks, nuns (I believe), all ranks and conditions, with tippets over their shoulders, some talking, some singing, some joking and telling stories, some silent and meditating; truly it is a singular sight, and stranger still if there should not be some shipwrecks on this miniature ocean! Here a *tête-à-tête*, perhaps a flirtation is going on; the temperature in the meantime being maintained by fresh water flowing in. I believe the patients are directed to begin with a bath of from half an hour to an hour's duration, and gradually increase till they reach eight hours' duration, which is continued for twelve to fifteen days, when it is diminished in the same proportion till they get back to the half hour. The duration of the treatment averages about twenty-five days, varying somewhat according to circumstances. A set of regulations and sumptuary laws are suspended against the walls for the preservation of order and decorum in the baths, signed by the burgomaster, who enforces his authority by a fine of twenty francs for any offence against his code. After emerging from the bath, the patient is directed to remain one hour in bed.

Great stress is laid by the physicians who prescribe these baths on what they call the "*poussée*," which, I take it, corresponds to our *crisis.* It consists mainly in a cutaneous eruption, which occurs from the sixth to the twelfth day, and is preceded by febrile symptoms and a suburral condition of the primæ viæ. The tongue is coated, the appetite fails, and insomnia, with a vague feeling of sadness and inquietude, is experienced. At this period vomiting often produces excellent effects. Gradually a redness, accompanied with heat and itching, spreads over the whole body except tha hands and face. This is succeeded by a true eruption, when the febrile excitement and other symptoms yield, although the *crisis*, under the continued use of the baths, still prevails. In some instances small red patches appear on the surface, which yield to pressure of the finger, and resemble erythema, though in a severer form it assumes the characteristics of erysipelas. Occasionally the skin is covered with small vesicles, and the cuticle desquamates. I shall not, however, dwell on this phenomenon, which is regarded by some as specific, and occasioned only by the baths of Lenk. For there is every reason to believe that baths of distilled water of the same temperature, of equal duration, would produce the same effects. These baths are chiefly recommended for scrofulous and syphilitic affections, old ulcers, cutaneous affections, and internal organic diseases.

There are a few other mineral waters in Switzerland, but of no great importance; such as the *cold ferruginous springs at Saint Moritz* (Grisons), containing a very large amount of carbonic acid gas, and which were recommended by Paracelsus in the sixteenth century. They are chiefly administered in the treatment of anæmia and chlorosis, both externally and internally. There are also the *alkaline waters of Tarash* (Grisons), of an alkaline bitter taste, slightly astringent, and which seem to be saturated with carbonic acid gas. These are tonic, alterative, and laxative, and highly recommended in asthma, engorgements of the abdominal viscera, languid portal circulation, etc. The *carbonated alkaline waters of Weissembourg* (Berne) have recently attracted some attention, as sedative in affections of the respiratory organs, as subacute inflammation of the bronchial mucous membrane, incipient phthisis, etc.; we might also mention the *iodine and bromine spring of Saxau* (Valais) near Martigny, recommended in Scrofula; also the *sulphuretted thermal waters of Lavey* (Valais) near Saint Maurice, also containing iodine and bromine, and employed in the same cases.

The above comprise all the mineral waters of Switzerland which are in much repute in the treatment of disease. Of course, their medicinal properties can only be glanced at within the limits to which I must necessarily confine my remarks. Those of Germany, etc., must be treated of in the same summary manner.

American Medical Times.

SATURDAY, JANUARY 24, 1863.

REGISTRATION OF MARRIAGES AND BIRTHS.

The opening paragraph of the recent annual report of the City Inspector of New York contains the following statistical summary: marriages, 2,896; births, 7,612; deaths, 21,244. If this were a correct, or even an approximately correct return, the facts would be of startling import. The aggregate of deaths would exceed the aggregate of births threefold! It would not be difficult, with this data, to fix the period of the depopulation of this island.

But it is not presumed that this statement has the slightest foundation in truth. On the contrary, it simply furnishes an index of the entire disregard of law, as well as all moral obligations, by two of the most high-minded professions. For, it is a duty imposed by solemn legal enactment that every clergyman and justice shall make accurate returns to the City Inspector of every marriage solemnized by him, and that every physician or person officiating as accoucheur shall make accurate returns of every birth occurring in his practice. And this law is penal; for every violation a fine of fifty dollars is incurred. It is not, however, as a penal offence that we wish to regard the neglect of the duty imposed by this law on professions so jealous of their honor, and sensitively proud of their conscientious dischargeof duty; we have, we trust, but to point to the moral obligations which the law imposes to secure a strict obedience to its statute.

The vital and social statistics of any people are the bases of calculation of their material strength and progress in true civilization. Hence most enlightened nations have carefully collected these facts, and preserved them in their archives. They are also of immediate value in legislation, and afford the best guide in the adaptation of civil and municipal regulations to the specific wants of the people. From them we learn the influence of climates, of trades, of soils, of country and city, etc., on the health and mortality of classes. Finally, vital statistics are of value to the science of medicine. It has been well said:—"The registration of births and deaths is the registration of millions of facts in physiology and pathology, each individual fact having diversified relations. Moreover, these facts are so collected and registered as to be capable of being tabulated, and so exhibit their diversified relations under every possible aspect. It affords that long wished-for desideratum, a record of multitudinous medical observations, and so similar in their essential points as to admit of comparison." The most weighty considerations, both to the city and the profession, are involved in the fulfilment of the Registration Act of this State, which is now rendered a dead letter by the indifference of those who should carefully carry out its requirements. We hold, therefore, that it is the most sacred duty of clergymen and physicians to rigidly observe this law, and report the marriages and births which come under their cognizance faithfully and promptly.

In the early days of registration in England, the same appeal had to be made to the medical profession. In the following language the President of the Royal College of Physicians, Sir Henry Halford, and the President of the Royal College of Surgeons, Sir Astley Cooper, addressed their brethren:—"We resolve to fulfil the intentions of the Legislature in procuring a better registration of the causes of death, being convinced that such an improved registration cannot fail to lead to a more accurate statistical account of the prevalence of particular diseases, from time to time. We pledge ourselves, therefore, to give, in every instance which may fall under our care, an authentic name of the fatal disease. And we entreat all authorized practitioners throughout the country to follow our example, and adopt the same practice, and so assist in establishing a better registration in future throughout England." From efforts like these, independent of any compulsory enactments, has grown up that extensive and accurate system of registration, which is now the special pride of every intelligent Englishman. It is by similar efforts that we are to establish in this country a system of registration which will be an honor to the city, and largely promote the welfare of the people.

We have alluded briefly to this most important subject with the opening year, in the hope that many, perhaps the great mass, of the physicians of New York, may be induced to report regularly to the City Inspector, during 1863, the births which occur in their practice. The labor is slight, as all that is required is to fill a blank, and mail it to the City Inspector. We sincerely hope, that many hitherto negligent may be stimulated to comply with this most righteous and necessary law of our Health Department, and that the records at the close of the year will present reliable statistics of the births, as well as deaths, which have occurred.

THE WEEK.

We learn that Prof. John V. P. Quackenbush, of Albany, has been appointed by His Excellency Governor Seymour to the office of Surgeon-General of the State of New York. Hitherto in times of peace it was a matter of no importance who filled this merely honorary position on the Governor's Staff; but recently since the war began it has become an office of vast responsibility. The appointment of the surgeons for nearly two hundred regiments, or for more than two hundred and twenty thousand New York volunteers, has already devolved upon this department. The department has also to ascertain the capability of surgeons for this office, and to watch with careful eye how they acquit themselves in the service; it has also under careful surveillance all that pertains to the health of our volunteer force. The public and the profession both know with what indefatigable zeal and ability the retiring Surgeon-General, Dr. Vanderpoel, has performed these duties. The public and the profession are therefore largely interested in his successor.

Dr. Quackenbush is a native of Albany, a graduate of Williams College in 1839, and has been in the practice of medicine about twenty-two years. For several years he has occupied the chair of obstetrics and diseases of women in his Alma Mater, the Albany Medical College, a position for which his large and successful experience peculiarly qualifies him. Dr. Quackenbush is courteous and obliging in his manners, easily approached, and ever ready for business, which he dispatches promptly and correctly. Zealous for the honor of the profession, and especially as represented in the medical corps of the New York State troops, he enters upon the onerous duties of his department, with a determination, we believe, to sustain the high expectations of the medical profession, which will give him a cordial and generous support.

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The Chairman of the Committee on Medical and Surgical Statistics, of the New York State Medical Society, Dr. J. G. Orton, of Binghampton, has issued circulars requesting returns to be made to him of whatever statistics members may have recorded. He says:—"Any Statistical Facts which you may have recorded, be they ever so few, will be thankfully received, and due credit will be given to all communications unless otherwise ordered. Your original manuscripts, etc., will be carefully preserved and placed in the hands of the Secretary of the State Medical Society, of whom they may be obtained upon application." It is very desirable that these returns be made immediately, and it is to be hoped that they will be full and accurate.

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The appointments to vacancies in the medical staff of the regiments in service from this State are made through the Surgeon-General of the State. Such vacancies, we understand, are constantly occurring, and there is likely to be a constant demand for first class surgeons and assistant surgeons during the war, and indeed long afterwards. An examination of applicants, together with the filing of testimonials of fitness and character, is preliminary to the appointments. Such examinations may be had any day, at the office of Surgeon-General Quackenbush, at Albany.

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The recent annual election of officers of the New York Academy of Medicine resulted in the re-election of Dr.

Anderson, as President for the ensuing two years. This is a well deserved compliment to the zeal, courtesy, and ability, with which **Dr. Anderson** has discharged the duties of his office. During his presidential term the Academy has been a working body, and has acquired a wide reputation by its scientific papers and discussions.

At the Annual Meeting of the Pathological Society, **Dr. David S. Conant** was elected President for the ensuing year.

Correspondence.

ELECTRO-MAGNETISM AS A REMEDY.

[To the Editor of the American Medical Times.]

Sir:—In your No. of the 17th inst. there is a communication from Dr. H. Lassing with kind suggestions from experience, intended to throw light on the apparent ill results following the application of the induced electric current in the case which I reported in your issue of January 3d. The remarks of Dr. Lassing are of themselves sufficient to show without comment, that he is confused in regard to the various kinds of electric currents, and that his experience in electro-magnetism differs from authors. I can but consider the Doctor's unfavorable opinion of Ruhmkorff's electro-medical apparatus as very gratuitous. I certainly neither know nor can judge as to the perfection of the apparatus employed by Dr. Lassing, the inventor of which, I regret, he does not mention, but, according to best authorities, and from my personal experience of many of the electro-medical apparatuses, I have considered Ruhmkorff's as perhaps the best suited apparatus for medical purposes. The reduced size of the instrument, the advantage of the batteries working uniformly and for a long time with a small quantity of bisulphate of mercury, and thus being free from the inconveniences of those in which the voltaic electricity is disengaged by the chemical action of some acid solution upon the elements,—a powerful coil with the separation of the two currents, the primary or extra current, and the secondary current or the induced in the fine wire, with the best of all rheotomes, the trembler, and a graduated regulation; such are briefly the improvements of Ruhmkorff's apparatus, which Doctor L., however, condemns as not well constructed. I wish I could subscribe, without changing my notions of physics, to what Dr. Lassing thinks *quite evident* in the method of application of the induced current, which I described; but I never meant to express, nor did I write anything like "*that the negative pole of the induced current was applied in the cervix, while the positive pole was attached to the pubes.*" Indeed, I am well aware that there is never a permanent positive and negative pole in an inductive apparatus, as admitted by those familiar with electricity, and by the Doctor himself, who speaks in his letter of *the constant change of polarity of the induced current*, although a moment before he disregarded the peculiarity of the current, most likely because he does not distinguish the direct galvanic current from the primary or extra current, *induced* in the thick wire of an induction apparatus. For the sake of evidence, I beg to remind the Doctor, in illustration of the constant change of polarity of the induced current, of the impossibility of decomposing water by it, simply because oxygen and hydrogen simultaneously disengaged in each of the poles, alternately being positive and negative, immediately combine again; yet a more striking proof of this phenomenon may be observed, if instead of water a solution of starch and iodide of potassium is employed, the blue reaction of the free iodide being then evident at either of the poles. Dr. Lassing charges me with calling the direct current *primary:* I am at a loss to know where I claimed such originality. Let the Doctor read my article and he will see that I call *primary current* the so-named by every author, *i. e.* the *extra current* of Faraday, *induced* in the thick wire. The Doctor may read in the excellent "Treatise on Medical Electricity," published by Dr. J. Althaus, (London, 1859), page 205, "*A volta-electric apparatus fit for medical use must furnish two currents,* viz. *the primary current or extra current* induced by the action of the spirals of the thick wire upon themselves; and *the secondary current or the current induced in the second wire*, which is long and fine."—I could present many other similar and equally valuable quotations to sustain the propriety of the term *primary* employed by me. Finally, the application of the induced current did not fail to determine the result expected, as the Dr. writes; on the contrary, the uterus contracted upon itself, and there was stoppage of the hæmorrhage. I presumed that such would be the effects of the induced current from its physiological effects, and although I know besides that irritation of the womb is among the causes of reflex paralysis, and that sensibility may be notably diminished by a continuous galvanic current, or by a rapid mild induced one, yet I was not aware that the latter could be attended with the relapsing paralytic effects described in the case. The practice of our science discloses endless difficulties, which experience can only solve; we have to learn new facts at every step, and imperfect and liable to error as the mind is, it is no little satisfaction to find in the course of our pursuits a kind pride guarding us from the latter; but a great physician says "that there is only one way to be sure of anything in medicine, and that is to accept only positive evidence"—a sound and wise precept, which must likewise be applied to the suggestions of those who want to protect us against prejudices and wrong impressions arising from our natural inability.

Yours, &c.,
M. Gonzalez Echeverria.

New York, January 19, 1863.

Army Medical Intelligence.

(Circular No. 1.)

Surgeon-General's Office,
Washington City, D.C., Jan. 14, 1863.

By order of the War Department, the following instructions are promulgated in reference to discharges from General Hospitals:

1. Under no circumstances has the Surgeon in charge of General Hospitals, as commanding officer thereof, authority to discharge soldiers.

The final statements, and all the discharge papers, will be made out under the supervision of the military commander, and signed by him. (Vide paragraph 3 of General Orders, No. 36, of 1862.)

To prevent confusion and misunderstanding hereafter, Medical Officers in charge of General Hospitals are enjoined to be strictly guided by the above instructions.

II. Surgeons in charge of General Hospitals will, as soon as possible after the close of each month, transmit to this office a copy of the "Statement of the Hospital Fund." (Vide paragraph 1264, General Regulations.)

Medical Directors will urge upon Surgeons under their control the importance of prompt obedience to this regulation.

William A. Hammond,
Surgeon-General U.S.A.

GENERAL ORDERS, NO. 7.

War Department, Adjutant General's Office,
Washington, January 7, 1863.

The following Act of Congress is published for the information and government of all concerned:

AN ACT to improve the organization of the Cavalry Forces.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That hereafter each regiment of Cavalry organized in the United States service may have two assistant surgeons, and each company or troop of Cavalry shall have from sixty to seventy-eight privates.

Approved January 6, 1863.

By order of the Secretary of War.

E. D. Townsend, *Asst. Adjutant-General.*

Medical Director's Office,
Washington, D.C., Jan. 16, 1863.

Sir:—I have the honor to report that all the churches in this city, and in Georgetown, which were taken by the Government for military hospitals, have been restored to their respective congregations, with the exception of Trinity Church in this city, ordered to be retained by the Secretary of War.

Very respectfully,
Your ob't serv't,
R. O. Abbott,
Surgeon U.S.A., and
Asst. Med. Director.

Surg.-Gen. W. A. Hammond, U.S.A.

CHANGES, ORDERS, &c.

So much of Special Orders 359, current series, Adjutant-General's Office, as dismissed Assistant Surgeon W. H. Heath, 2d Massachusetts Vols., has been revoked, and he is restored to his command, provided the vacancy has not been filled.

Ass't Surgeon E. G. Derby, 94th New York Vols., has been ordered to rejoin his regiment.

Ass't Surgeon J. R. Eddy, 12th New York Vols., has been dismissed the service of the United States, for being in Washington without proper authority.

Leave of absence for twenty days has been granted to Surgeon W. C. Rolla, 23d Pennsylvania Vols., and to Assistant Surgeon Dwight W. Day, 154th New York Vols.

Ass't Surgeon A. J. Libby, 24th Maine Vols., having tendered his resignation on account of disability, has been mustered out of service from date of muster in, there being no evidence of service rendered by him to the Government.

So much of Special Orders 359, current series, Adjutant-General's Office, as dismissed Surgeon W. Faulkner, 83d Pennsylvania Vols., for absence without leave, on the report of the Medical Director, Army of the Potomac, has been revoked, Surgeon Faulkner having been honorably discharged by Special Orders 281 from Headquarters of said Army.

Leave of absence for twenty days has been granted to Assistant Surgeon J. D. Hewitt, 107th New York Vols., and for two weeks to Assistant Surgeon J. H. Bailey, U.S.A.

Ass't Surgeon E. S. Silcox, 13th Massachusetts Vols., has been dismissed the service of the United States, for inveigling soldiers into paying him for professional services.

So much of Special Orders 251, current series, Adjutant-General's Office, as musters Surgeon J M., 14th New York Vols., a supernumerary officer, out of service, to date February 20th, 1862, is amended, so as to muster him out to date October 13th, 1862, that being the date he ceased duty.

Leave of absence for ten days has been granted to Surgeon W. A. Madill, 23d New York Vols.

Ass't Surgeon J. D. Lowis, 25th New York Vols., dismissed the service by Special Orders 337, current series, Adjutant-General's Office, has been restored to his command, provided the vacancy has not been filled.

Surgeon A. P. Dalrymple, U.S.V., is on leave of absence in New York.

Surgeon A. B. Shipman, U.S.V., is on sick leave at Syracuse, N. Y.

Surgeon G. Grant, U.S.V., has been relieved from duty with the Army of the Potomac, and ordered to report to the Surgeon-General.

Surgeon G. S. Palmer, U.S.V., has been relieved from duty in the field, and ordered to report to the Medical Director at Washington, D. C.

Surgeon A. H. Thurston, U.S.V., has relieved Surgeon E. Swift, U.S.A., as Medical Director at Nashville, Tenn.

Surgeon A. N. Dougherty, U.S.V., has been assigned to duty as Medical Director of the Right Grand Division, Army of the Potomac.

Surgeon J. H. Taylor, U.S.V., has been assigned to duty as Medical Director, 2d Army Corps.

Surgeon Thomas Sim, U.S.V., has been dismissed, the service of the United States, for disobedience of orders.

Ass't Surgeon Geo. E. Patlee, U.S.V., has been dropped from the rolls of the Army for absence without leave.

Surgeon T. G. Catlin, U.S.V., has relieved Surgeon Thomas Azpell, U.S.V., in charge of the Marine Hospital, St. Louis, Mo.

Surgeon Ira Russell, U.S.V., is in charge of General Hospital, Fayetteville, Ark.

Surgeon W. S. Forbes, U.S.V., has been placed in charge of the Episcopal Hospital, Philadelphia.

Surgeon W. W. Nassau, U.S.V., has been ordered to Memphis, Tenn., for duty.

Ass't Surgeon J. W. Brower, U.S.A., has entered upon the duties of Medical Purveyor at Memphis, Tenn.

Ass't Surgeon D. L. Huntington, U.S.A., is on duty in the Medical Director's Office, Fort Monroe.

Surgeon A. Crispell, U.S.V., has relieved Surgeon Dalrymple as Post Surgeon at Hilton Head, S. C.

Surgeon W. H. Thorn, U.S.V., has been assigned to duty in the Medical Director's Office, 11th Army Corps (Sigel's).

Surgeon A. L. Cox, U.S.V., has been placed on duty with the 1st Army Corps, Army of the Potomac.

So much of Special Orders 377, series of 1862, Adjutant General's Office, as discharged Assistant Surgeon H. W. Owen, 75th Ohio Vols., on account of disability, has been amended to date November 28, 1862.

The muster into service of Assistant Surgeon Eugene Schumo, 2d N. Y. Vols., of date September 3, 1862, has been revoked, there being no evidence of service rendered by him to the Government, and he having tendered his resignation.

Surgeon Thaddeus A. Kearney, 122d Ohio Vols., having tendered his resignation, has been honorably discharged the service of the United States.

Leave of absence for thirty days has been granted to Surgeon John F. Whitbeck, 108th New York Vols., and to Assistant Surgeon Baker, 95th New York Vols.

The Medical Purveying Depot at Columbus, Ky., has been removed to Memphis, Tenn., by order of Assistant Surgeon General Wood, U.S.A.

Ass't Surgeon C. F. Cornick, U.S.A., has arrived at and entered upon his duties in the General Hospital at Portsmouth Grove, R. I.

Ass't Surgeon Geo. N. McGill, U.S.A., has been transferred from the Cliffburne Hospital to the Lincoln Hospital, Washington, D. C.

Dr. Jno. M. Cuyler, Medical Inspector, U.S.A., has arrived at Philadelphia, and entered upon the duty of President of the Army Medical Board, in addition to his inspecting duties.

Ass't Surgeon G. M. Sternberg, U.S.A., has been assigned to duty in the Office of the Medical Director, at New Orleans, La.

Leave of absence for twenty days has been granted to Surgeon F. Reynolds, 88th New York Vols., for eight days to Assistant Surgeon W. O. McDonald, 65th New York Vols., and for ten days to Assistant Surgeon W. H. Lincoln, 7th Massachusetts Vols.

Ass't Surgeon L. H. Sheldon, U.S.A., has been transferred from General Hospital at Portsmouth Grove, R. I, to the Military Academy, West Point, N. Y.

Medical Inspector Geo. H. Lyman, U.S.A., has arrived at Nashville, Tenn., and entered upon his duties as Inspector of the Army commanded by Major-General Rosecrans.

Ass't Surgeon O. Rogers, 40th New York Vols., having tendered his resignation on account of disability, has been honorably discharged from the service of the United States.

The leave of absence heretofore granted Surgeon J. H. Taylor, U.S.V., Medical Director 2d Army Corps, has been extended ten days.

Leave of absence for twenty days has been granted to Surgeon T. S. Christ, 45th Penn. Vols.

Surgeon J. G. Wood and Assistant Surgeon Robert Rae, 6th New York Artillery, have been discharged from the service of the United States.

Leave of absence for fifteen days has been granted to Surgeon J. B. Petherbuage, 65th New York Vols.

Surgeons D. L. Magruder and Assistant Surgeon W. P. Grier, U.S.A., and Surgeons S. R. Haven and Thomas G. Catlin, U.S.V., have been ordered to proceed without delay to St. Louis, Mo., and report for duty to Assistant Surgeon-General R. C. Wood, U.S.A.

Ass't Surgeon J. F. Randolph, U.S.A., as soon as examined for promotion, will proceed to St. Louis, Mo., to report for duty to Assistant Surgeon-General R. C. Wood, U.S.A.

Ass't Surgeon S. H. French, 109th New York Vols., has been ordered to report for duty to the Surgeon in charge of the General Hospital at Annapolis, Md.

Medical News.

At Vienna, on the 13th ult., the fiftieth doctor-jubilee of Dr. F. Jäger was celebrated. He received the good wishes of all the medical corporations; a new doctor's diploma was handed to him by the Doctorial College. Dr. Jäger's merits and works as an oculist are well known. He was, we read, the most faithful disciple of his master, Beer—the founder of the Austrian school of ophthalmology. His fame has spread through all Europe; and numerous orders adorn his breast.—*Brit. Jour.*

On the 17th ult., the Nestor of German physiology, Professor Purkinje, kept his seventy-fifth birthday. A series of ovations were made to him, finished up by an evening torchlight procession.—*Brit. Jour.*

At the French Academy of Medicine have been nominated for the ensuing year—as President, M. Larrey; as Vice-President, M. Grisolle; and as Secretary, M. Béclard. —*Brit. Jour.*

The Chair of Midwifery at Milan is at the present time being disputed (by *concours*) by Professors Grillenzoni of Ferrara (a deputy), Col-Bene of Modena, Paccianti of Naples, Madruzza of Bologna, etc.—*Brit. Jour.*

M. Sedillot was made a Commander of the Order of St. Gregory the Great by the Pope, on the occasion of his medical inspection of the army of occupation at Rome.—*Brit. Jour.*

Original Lectures.

LECTURES ON MILITARY SURGERY.

DELIVERED AT THE

COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.

By WILLIAM DETMOLD, M.D.

PROFESSOR OF MILITARY SURGERY AND HYGIENE.

LECTURE V.

et of Hospitals.—General Characters of Gunshot Wounds.—Extraction of Bullets, etc., etc.

NTLEMEN:—I need hardly point out to you that the culi- ry department of the hospital is of vital importance. e kitchen and all utensils in it must be kept perfectly an, and the surgeon must, from time to time, inspect the als as they are served to the patients, to see that they palatable and in sufficient quantity; for, while the ictest economy should be exercised, the patients must be stinted. The Surgeon-General has arranged a diet le which regulates the diet, and every day, when the geon makes his morning visit, he should, at the same e when he orders the medicine required, order the diet every patient, which is marked by the steward who ows the surgeon in his round, as "full," "half," "extra," .

You must understand something about the manner in ich the expenses of this Department are met. Govern- nt calculates that the sick men in hospital should not t more than the well; therefore it allows for every man hospital a full ration, which may be drawn from the nmissary either in full or in part; now, as in a hos- l there are always many who cannot eat their whole on, whatever is not drawn is placed to the credit of the pital, and thus the hospital fund is established, out of ich all extras and delicacies for the very sick, and other ll comforts for the patients, are paid. If there are ny grave cases in the hospital, which require extras, re will be, in the same proportion, fewer who consume ir whole ration, so that, with prudent management, ecially in larger hospitals, the hospital fund is amply icient to furnish all extras required by the more ously sick and wounded. If we add to this the judi- us and efficient aid given by the Sanitary Commission, may confidently assert that never have the wounded sick of any army, approaching at all the dimensions of s, been better provided for.

do not deem it necessary to say anything about the nner of making your requisitions for the hospital, or ut the form of the report, etc.; all that you will find in Army Regulations and in the blanks which are fur- ned for the purpose by the Commissary. Let me here ommend to you a book, which, under the modest title the "Hospital Steward's Manual," contains a great ount of information not only useful but necessary to the geon. The work is by Assistant Surgeon Woodward, after a favorable report of a commission appointed by Surgeon-General, the work has been adopted as a guide as an authority in all our military hospitals.

Having spoken at large, while on the subject of camps, those diseases which occur there, and which always lm a large proportion of the hospital accommodations, as typhus and typhoid fevers, diarrhœa and dysentery, smatic diseases, scurvy, etc., we come now to the con- ration of gunshot wounds, which must require the spe- attention of the military surgeon, so much so that ny works on military surgery are, in fact, nothing more works on gunshot wounds. I shall be comparatively f on this subject, as my friend and colleague, Dr. Mar- is at present lecturing on this topic, and for many ils I refer you to his able lectures.

unshot wounds were in former times considered as ething very mysterious, being made, as it was thought, by engines in the invention and construction of which the devil himself was concerned; they were treated accordingly, that is without sense; it was deemed necessary to purify the wounds by pouring into them boiling oil and the like, until Ambrose Paré took the first steps towards improving the treatment, by simplifying it, and bringing a little common sense into play. Although we no longer see anything mysterious in gunshot wounds, we must admit that such a wound has a peculiar character of its own. 1st. It is always a contused wound. 2d. The passage which the missile has made for itself through the part is lined with dead animal tissue, which has to be eliminated by suppuration, and therefore it does not heal by first intention. 3d. It is in most cases complicated by the presence of foreign bodies, the ball, pieces of clothing, etc. 4th. It is generally accompanied by a severe shock to the system in consequence of the crushing momentum of the missile. The danger depends first, of course, upon the importance of the part wounded, but, besides, upon the presence of the just stated complications, and also upon the momentum, weight, and form of the projectile.

A ball may either graze, or penetrate and lodge, or it may penetrate through and through and pass out again. If a large ball merely grazes a part, it may, without breaking the skin, cause serious destruction of the tissues underneath, hence the old and now discarded notion of the wind of a ball. A ball may penetrate and lodge, or, if it has been a spent ball, it may penetrate a certain distance, carrying the clothing of the man before it, without perforating it, and then fall out again. A gunshot wound with one opening is therefore not always proof positive that the ball has lodged. A ball may pass through, making two openings, one of entrance and one of exit, but it may leave pieces of clothing or other foreign bodies in the wound. On the other hand, two openings are not always proof positive that the ball has passed through; you meet occasionally wounded with two openings, and yet the ball, or perhaps even two, may lodge, the man may have been struck nearly at the same time by two balls, which is not an uncommon occurrence in an engagement.

Formerly it was laid down as an established fact that the opening of entrance was small, of a regular round shape, with the edges turned inward, and the opening of exit larger and more irregularly lacerated, with the edges everted. Later and more careful examinations, especially after the street-fights in Paris during the last French Revolution, have shown that this distinction is not always reliable.

Balls, especially spherical balls, take sometimes a most curious course, being deflected by tendons, aponeurosis, or bones, but in my opinion too much stress is laid upon this. Every author relates the freaks of balls in their passage, so that young or inexperienced surgeons are apt to consider this the rule instead of the exception. You must consider it as the rule that a ball, especially a cylindrical or Minié ball, takes a straight course; but to ascertain what the straight course would be you must try to put the wounded in the position in which he was when hit. I have seen many cases where it was thought that the ball had taken a circuitous route, and many false passages were made by probes along the muscles, and at last the ball was found in a direct and straight line, the only direction where the surgeon had not looked for it.

The best instrument for examining a wound is the finger; if the wound is too small to admit the finger, or too deep for the finger to reach the bottom, I prefer a long flexible lead probe. Where the ball lodges against the bone it is important to distinguish whether you touch the ball or the bone; the instrument suggested by Nelaton and sent by him to the surgeons in attendance upon Garibaldi is very ingenious; it is a flexible bougie, armed with a tip of porcelain (biscuit), which, when rubbed against the ball, will show the marks of the lead.

Many instruments have been invented and recommended for the extraction of the ball; the best is a long scoop forceps, with small teeth, set a little outward, so as to catch and hold the ball even if not grasped in its largest diameter. I prefer it to the new forceps of Mr. Tiemann, the sharp points of which may do mischief. Many instruments which appear very ingenious work best when you have the ball in your hand, but nothing like so well when it is at the bottom of a wound.

The best time for the extraction of the ball is immediately after the reception of the wound, which may be enlarged for the purpose; but a good deal of care and judgment are required if you are in the neighborhood of parts where your searching for the ball may do mischief; this applies especially to cases where the ball has penetrated one of the large cavities. If the ball cannot be found it is best to wait till the inflammatory swelling has subsided, and suppuration fairly set in. Where, as it frequently happens, the ball has nearly penetrated the part, and can be felt under the skin at the opposite side, an incision should be made upon the ball grasped and fixed between the fingers of the left hand, and it will be easily extracted; you gain besides a free exit for the discharges by this process.

Let me warn you here against a practice into which surgeons are apt to fall, that is too frequent examinations. If you want to make an examination, put the patient under the influence of an anæsthetic and make a thorough examination; poking frequently at a wound only gives the patient pain and exhausts his nerve power, he loses perhaps half an ounce or more of blood every time, which he may not be well able to spare, and you gain no result.

There is no question that balls may lodge and become encysted, and be carried for years or for life without pain; still you are not free from danger until the ball is out.

Pieces of clothing and other foreign substances, if they can be felt with the finger, should be immediately extracted; if not, they will be readily removed when suppuration is established by injecting a good stream of tepid water from a large syringe, by which the pieces of cloth will be floated out. Splinters of bone which have become detached constitute foreign bodies, and must be treated as such, i.e. they must be removed.

Original Communications.

GANGRENE OF THE MOUTH AND FAUCES.

BY RUFUS KING BROWNE,

LATE SURGEON U.S.V., SURGEON IN CHARGE OF U. S. GEN. HOSPITAL, DEPARTMENT OF THE GULF.

THE disease I described is in no one respect or particular, either minute or general, similar to, the same as, or in any way like the case described by Dr. Wm. H. Studley, Surg. U.S.A. I have the utmost regard for scientific exactness when I say that the gangrene of the throat is no such disease as that. A regard for scientific precision and proper discrimination requires me to say this. It was natural to suppose, and will be supposed by those who have not witnessed the ravages of the disease here, that it must resemble some form of throat disease. But this is a misapprehension, which consists in supposing that because it sometimes involves the throat, it must resemble some not unusual form of disease of that organ. I will briefly attempt to state the particulars in which it most widely contrasts with those described by Dr. Studley. These particulars appear in more palpable contrast, so long as we endeavor to assimilate it to some other form of throat disease, or to find some one particular in common. I was most strictly correct in saying in my first announcement of it, that it was a "non-febrile, non-inflammatory disease." Subsequent familiarity with it and study of it in a number of living cases, has enlarged and improved my knowledge of it, but has, at the same time, confirmed me in the above statement.

First, as to its location—I find that although I termed it "gangrene of the throat," it invaded the throat as low as the glottis, in but two of the whole number of cases I have ascertained, viz. twenty-one. In seven of this number, it invaded the tonsils, one or both, and in the remainder, including nine living cases, was wholly confined to the mouth and fauces. The gangrene of the mouth I described, is, in the first place, a destructive disease to the tissues it involves—a disease which eats away those tissues, which turns them into slough and foul debris, in place of which there is left an excavation, a wound—a complete loss in this way of all the parts which go to make this debris.

In all the living cases, which I now have in full reported before me, it commenced its destruction in the mouth, the mucous membrane of which was first invaded. The first steps of invasion were in circumscribed spots (more minutely to be described hereafter), which, as the ruin proceeded, involve the sound intervening portions, and become one. Prior to the appearance of these there is no inflammation, and no exudation of fibrine or lymph, nor any infiltration, swelling, or tumefaction. The mucous membrane of the mouth or gums is hardly a place in which we should look for either, though *tumefaction* might occur there. It is not therefore a disease of the glottis or the windpipe, though in some instances a part of that organ may, in its course, be destroyed by it, without, however, taking on any of the symptoms characteristic of the several forms of throat disease.

There is, therefore, peculiarly enough, an absence of all the symptoms we associate with disease, acute and chronic, of that organ. There is, therefore, no œdema of the walls of that organ, and no exudation of lymph or fibrine, circumscribing and diminishing its *cavity*.

There is no new formation of membrane therein, as characteristic of diphtheria, or collection of any similar substances. In but the two cases, where the throat, as low as the glottis was wounded, did we find any increase of the usual thickness of the walls of that organ, and this wa precisely as I described it, "very slight," and on the oute wall of the larynx on one side. There was no inflamma tory action in that locality in any of the living cases, no had such been complained of in the case which first becam known after death.

There is never, in any of the living cases, any sense eonstriction, difficulty of breathing, or pain in deglutitio all of which are characteristic of the usual diseases of tl throat and glottis. None of these symptoms exist, whe the ravage is so great as to have completely eaten aw through the buccinator and the masseter muscles, and tl skin.

The disease consists in something entirely different fro all these symptoms of throat disease, and in the total a sence of them.

It differs from all these precisely in the sense a destru tive wound differs from œdema or a tumor, both of whi classes are not destructive of, nor a loss of, but accessory the diseased parts.

I fully feel and appreciate the difficulty I shall have encounter in having the facts accepted, by those who ha not witnessed the disease, because I fully understand present professional mode of looking at pathology. despite this, I am bound in the interests of science to rep the facts precisely as they are—to report *these precisel they are*, without coloring, is my only aim. My *understa ing* of the cause is another and different thing, which not propose to present now. Some of these cases h been under observation now for more than a month, have been carefully examined one or more times a day.

When, therefore, I say the disease is non-inflammator that is *precisely the fact.* Thus there is neither un redness, nor other sign of inflammation attending its gress, from the first stage to the last, except in sev cases a slight tumefaction, as much devoid of any of signs of inflammation as a cold abscess is. This wil accounted for, in my report, and it always supervenc and never precedes the ravage.

When too I said the disease was non-febrile, nothing ould have been more true to the facts. Equally true was to say the disease is without constitutional symptoms. It not accompanied, as I expected it and looked for it to be, any febrile symptoms, nor are those who have it fever tients. Thus totally *un*like in *every* specified particular, . Studley's case, there is no "continued fever" with haracteristics of typhus," or typhoid, "no dry, blackish-own tongue, a persistent stupor, inability or disinclination answer questions, or the characteristic dark spots of the in," these all being symptoms and effects of some form continued fever, while the disease I have described is one thout all these "worst symptoms" to disappear. It is a ease which eats away tissues, nor does the patient ever eathe laboriously, or show any general affection of the onchial and pulmonary tissues. All that was abnormal, und by the Doctor in the epiglottis before death, and the topsy after death, is wanting in this disease. This dis-se never presents a blackish-green swollen mass, or any ss, while the very thing which attests its power, viz. loss of substance, did not exist in the case he reports, he tells us the membrane was perfectly entire.

This state of the glottis is no uncommon one, and the ngrenous appearance the Doctor speaks of, by which is ually meant the greenish-black color, is frequently met h in various parts of the body. *It is death of that rt, without actual decay, or disintegration.*

Not at all similar is what I have called gangrene of the oat, which is the utter dissolution of the parts into anato-cal debris—a foul liquid and solid putrescence. The tnesses of this disease have, like myself, in vain sought assimilate its characteristics to any they had learned of, to find a connexion between it and some well known hexia or general condition. Thus the case above alluded where the disease had made the greatest progress in any ing case, having nearly destroyed throughout one-half of e left cheek, and one-half the thickness from within, of e right, could be made to experience no pain where the unded parts had been handled, for the purpose of elicit-g some expression of sensibility there. He is emaciated a mere skeleton, yet has no symptoms except what be-nged to debility. The case is Dr. Morse's of this hospital, ho intends to report it. Its progress has been very rapid. none of the living cases has there been any symptom of *nctional* trouble of the throat, a fact itself the most perfect proofs of its non-inflammatory character in the usual nse of inflammation. No pain is complained of during its ogress, and a sense of tenderness can only be elicited some disturbance of the parts, either from food in the outh or by handling. The sensibility then evinced per-ns exclusively to the whole parts forming the border of e cavities. It is, therefore, as painless as any disease can where the body diseased maintains *its sensibility*. Its st stage is never marked by any heightened sensibility, r does this appear during its progress.

It is remarkable that in all the cases which have been aled, the disease has reappeared after a few days.

When we speak of disease of the throat, we mean me affection of the organ which impairs its office; and is will be evinced either in swelling, tenderness, or pres-re, soreness, both with or without deglutition, so far as e swallowing parts are concerned, or impaired freedom respiration, or kindred difficulty so far as the breathing rt is concerned.

But the gangrene we described is in none of these parti-lars a "disease of the throat." In but one case has there en any tenderness spoken of when inquired after as low s the tonsils, and that circumscribed to one of those glands. nd it is a very elementary point to understand that the moval of its protecting covering, and exposure of the rts beneath, forming the border or edge of the cavity; e destroyed parts would explain this tenderness there.

So, too, any slight tension or traction upon these borders, y disturbance of their natural repose, by holding the eek away from the gums with the finger, by the attrition of food, etc., would effect some feeling of tenderness.

The disease is sometimes on the inner side of one cheek, and sometimes on the tongue of the same side. It never interferes in the slightest with the movements of the glottis, nor causes any product of pathological activity to occupy its cavity, or to swell its walls inwardly. The ease and freedom of the respiratory movements are not interfered with. The difficulty of breathing, I reported as an incident of one case, found afterwards to have the disease not known before, "during the last half-hour of life," was precisely that change in the respiratory movement which always attends the close of life. The breathing of all the living patients who have the disease, is as free and natural as my own. It causes no particular disturbance of any of the special functions. In the worst case we had, the gums were not destroyed, and are as firm and sound, though pale, as my own; but in other cases of long standing, the disease literally consumes them, leaving the teeth standing in the alveoli. In some cases where the progress is rapid, large sloughs are detached in others, where it is slow—debris is nearly the only form of slough. The seat of the excavation is mainly in the mouth; is wholly confined to it in all but two of them, and is not known to exist in the glottis at all, but in one or the other of the tonsils. Were I now to describe it irrespective of the ravages first found, I should not call it a throat disease at all, but one of the mouth and fauces. The cheeks, sides of the tongue, and the tonsils being the parts implicated, microscopic examination of the debris made by myself, and verified by Prof. Crawcour and Prof. Riddle, of this city, discloses no sign of membrane, though the mucous tubules were found in abundance. I shall present a complete analysis of these elements with drawings; and some experiments are in progress to decide whether the spores of fungi exist in the debris. If so, its origin would be at once accounted for. A more complete account of the particulars of my continued observations will be made out for publication.

This mistake, viz. that of identifying this disease with what disease of the part we are acquainted with is a perfect, because inadvertent proof that it has not been observed or described; for we could not, in the particular nature of the case, and in the nature of scientific knowledge, see that those *are* other diseases, until we know what *this is.* Of course, we could not at first assume *previous* ignorance of it until, on becoming acquainted with it, we became aware from the date of knowledge of our previous ignorance, for the moment our knowledge dates, our ignorance, up to that moment, first becomes apparent.

Such, indeed, was precisely the state of an eminent medical friend, who supposed he had seen two cases years ago of the disease, until I gave him an account of its etiology, when he promptly said, he *now* knew that his cases were entirely dissimilar, and that of this disease he knew nothing whatever: and such, indeed, was in part my own state at first, until repeated sights of the disease furnished the knowledge which supplanted my previous ideas, class it with some form of throat disease, known to others if not to myself.

My own hurriedly penned language, too, naming it a *throat* disease, would naturally mislead into the supposition that it was some peculiar form of disease of that organ *alone;* and hence ally it more or less closely with different affections peculiar to that organ.

All misconception may be guarded against by stating that this gangrene is not a disease which subverts the organic functions of that organ, until it has *eaten* it away, and only then by such destruction which is its effect or consequence. Apart from this, all forms of throat disease with which we are acquainted commence or continue with some obstruction of the part, and some abnormal action dating therefrom, whence intumescence, tumefaction, infiltration, morbid deposition, etc. etc.—none of which belong to this disease.

As I shall specify hereafter, this commences by a degeneration and consecutive loss of the mucous membrane of the mouth first, which may afterwards extend to the throat, and involve its membrane by *destroying* it. The loss commences by a degeneration and consecutive breaking up of the epithelial surface, and continues from without inwards, as hospital gangrene does. Now, when I state this destruction, I do not speak of a destruction as a direct consequence and finale of previous obstruction, inflammation, etc., etc., of the parts below the surface—with pressure, tension, etc., which are characteristic of all forms of throat disease, which are described. I speak not of this kind of destruction in whole or part, but of another type. Of that character, were the cases remembered by Dr. Harris, who at first supposed he had in these, similar cases to the gangrene I adduce, but who at once relinquished the idea when I particularly described the disease. Nor is the destruction of the character of that in cancrum oris, wherein solid pieces drop away from their anatomical connexion. All the difference there can be between this mode of destruction of the tissues, and ordinary gangrene, exists between all of them, and the gangrene I have described. I do not propose to touch this point again, and whoever *does*, may, without further correction from me, call it what they may desire. All that I have done, and will do, is to report the facts. I have futilely sought to assimilate it to any disease I know of. Success may attend the efforts of others in this direction.

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CASE OF LIGATURE OF AN INTERCOSTAL ARTERY BY A PECULIAR MODE.

By B. HOWARD, M.D.,

ASSISTANT SURGEON UNITED STATES ARMY.

Priv. J. B. Bruce, Co. C, 31st Ala. Vols., æt. 17, naturally a feeble youth, was wounded in the chest by a Minié ball and taken prisoner at the battle of Shiloh, April 6, 1862.

My attention was specially called to his case the second day out from Pittsburgh Landing by my friend Dr. Bush, Senr., of Lexington, Ky., because of the many cases of wounds of the chest on board the transport, this was one of the very few in which the ball had lodged. The patient had a rather favorable appearance, and the wound looked well, with no tendency to hæmorrhage.

April 17th.—Patient was admitted to General Hospital, Louisville, Ky., with gunshot wound of the chest, fracturing the ninth rib about three inches to the left of the spinal column. The usual symptoms of gunshot wound of the lung which were present gradually disappeared. The hectic which ensued had ceased, and the patient, though very weak, was convalescing with remarkable rapidity. Medication had been discontinued, the only remaining treatment consisting in the use of simple dressing and bandage to the healing wound.

April 29th.—Calling accidentally at the hospital at about 1 P.M., I was informed an orderly had been dispatched to request me to visit the patient immediately. Secondary hæmorrhage had suddenly occurred, the bed was already saturated with blood, and the patient almost in a state of syncope. A medical officer had been trying in vain to stop the bleeding for about half an hour, and when I entered was controlling it by pressure on the wound. I slightly enlarged the wound, and discovering with my little finger a good many small fragments of comminuted bone, carefully removed some of them with dressing forceps. Meanwhile the arterial jet was becoming stronger and the patient momentarily weaker. There was evidently no time to be lost. Pressure at the wound was quickly supplied and steadily kept up. Stimulus was administered, and the patient being placed upon the table was put under chloroform. An incision was then made on the proximal side of the wound about an inch and a half in length, beginning about half an inch to the right of the margin of the wound and extending along the middle of the posterior surface of the ninth rib, the middle of the incision being about an inch and a quarter from the wound in order that spicula of bone might not interfere with the subsequent steps of the operation. Having laid bare that part of the rib and carefully defined its superior margin, I took the blunt-pointed strongly curved needle belonging to the chain saw, armed it with a well waxed ligature and introduced it, passing it immediately over the superior margin of the rib at the middle of the incision. The lips of the incised wound were well retracted, so that the eye of the needle could be sufficiently depressed to maintain the contact of its blunt point with the inner surface of the rib until it emerged at its inferior margin opposite the point of entrance. The ligature was then tied including both the rib and artery. The bleeding stopped instantly. In order to make the success secure I repeated the operation in the same manner at the distal side of the gunshot wound. The soft parts were then brought together and secured by sutures and adhesive straps.

The patient rallied from the effects of the chloroform, conversed rationally, but sank from exhaustion and died about 3 P.M.

The autopsy relieved me of the chief objection which appeared to present itself to the operation, for after careful examination it was found that in the case of both ligatures *the pleura costalis was not pierced.*

When the usual means had failed a tedious attempt was made in a case that came under my observation, to secure the bleeding ends of the artery, but without success.

In such a proceeding there must be great danger either of creating an opening, or of enlarging one already made into the cavity of the chest.

The operation with the needle, as described above, has the following advantages where ordinary means have failed:

The bleeding is stopped from the first moment of seeing the patient, as it can always be controlled by pressure at the wound until the operation is completed.

Pneumothorax need not be apprehended, as the pleural cavity is not penetrated, and even though it were, the operation, being subcutaneous, would not be likely to cause it.

A silver wire ligature, which it would be better to use, would not produce pleuritis of a serious character even though the pleura were pierced. The ligature could be twisted as tightly as necessary without danger of breaking and be withdrawn at pleasure.

From the relation of the artery to the rib more certai success might be anticipated from this operation anterior t the angle of the rib.

In the case given above, after all other means had bee tried in vain, the success of the operation was instant an complete, and but for the previous loss of blood would probably have saved the life of the patient.

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REMOVAL OF THE SUPERIOR MAXILLAR AND OTHER BONES OF THE FACE.

By HAZARD A. POTTER, M.D.,

OF GENEVA, N. Y.

December 13th, 1862, I operated upon Mr. White Philadelphia for the removal of the superior maxillary ar other bones of the face. I was assisted in the operation t my friend Dr. Geo. N. Dox of this place. As there a fe unusual facts connected with the case I submit a repo of the same for publication.

The patient had suffered, at times, most excruciati pain for five years, and demanded the operation from Su gery as his last and only hope—preferring death to l unhappy condition. I commenced the operation by maki an incision from near the inner angle of the left eye, in the cavity of the nose directly down to the angle of t mouth. All the bones of the nose had previously slough away, nasal, vomer, inferior and superior turbinated bor on both sides, and a portion of the ethmoid. The seco step was to raise the free, cut surface—pass the knife ir

e cavity of the nose, and separate the attachment of the
per lip to the gums, to the opposite angle of the mouth.
ıe partially detached nose and lip were then lifted up and
ned over upon the right cheek, when the whole cavity
the nose back to the throat was exposed. The adjacent
rts were now examined. All that portion of the
perior maxillary bones forming the floor of the nose and
f of the mouth was rough, brittle, and of a dark color;
fact, this was the condition of all the diseased bones sub-
ıently examined. The disease extended on the left side
far as the third or last molar tooth, and the teeth were
ly held in position by their connexion with the gums;
t portion of the alveoli into which the incisor teeth are
planted had previously come away by detached pieces.
emoved all that portion of bone forming the roof of the
uth except the palatine bones, which were sound and
l protected, a fortunate provision of nature to sustain
posterior arch and roof of the mouth. Having removed
the diseased portion upon the left side to the last molar
oth, I examined the antrums upon either side; I found it
cessary to remove a part of the left antrum and a part
the left inferior orbital plate. The right antrum was
und, and was not disturbed. This completed the opera-
n. It will be readily seen that the roof of the mouth
teriorly is without a bony support, and was not united
th the cut surface of the upper lip. To insure a union
these parts I passed a suture a little below and to the
t of the nostril, directly through the lip and soft floor into
mouth, and returned it from a proper point through the
f of the mouth and upper lip, coming out a little below
d to the right of the right nostril. The two ends of the
ure were now united and the parts brought in apposi-
n. and I have been so fortunate as to secure a union.

The disease was of five years' standing, and was unlike
y disease of the superior maxillary bones I have ever
n. I have operated four times for the removal of the
erior maxillary bones, but on a smaller scale; and in all
es which have come under my notice the soft parts have
n involved except this last. The bones did not have the
pearance of *osteo-sarcoma*, nor do I believe the disease
lignant, but have hope of a radical cure. It is now three
eks since the operation, and the patient is doing as well
I can desire, and will probably return to his home in a
v days.

During the whole operation, which occupied an hour and
ıalf, I administered chloroform. Much blood of necessity
ssed into the throat, and was frequently removed, yet I
ve never seen a patient recover more favorably from its
ects.

I was among the first, if not *the* first, to administer chloro-
m upon this continent after Dr. Simpson of Edinburgh
ught it to the notice of the Profession as an anæsthetic
ent. I have used it several hundred times since without
first unpleasant result, and I do not ask for a better
esthetic; and although I am compelled to differ with many
the Profession for whose opinions I have the greatest
spect, yet my long, frequent, and thorough experience
ces me to cling to chloroform until I am obliged by facts
ming under my own observation to cast it off.

anuary 3, 1863.

Duration of Life in Sweden.—From official details
st published, it appears that the average duration of life
Sweden during the eighteenth century was thirty-four
ars for men and thirty-seven for women; it is now forty-
ıe and forty-six respectively. Among the causes which
ve tended to increase the average of life in Sweden vac-
ıation holds the first rank. A hundred years ago one-
venth of the deaths were attributable to small-pox, while
w there is scarcely one death in a thousand owing to
at disease.—*Brit. Journ.*

The Francisco journals state that Dr. Bodinier, a French
ysician, was drowned at the time of the burning at sea
the *Golden Gate*.

THERAPEUTICS OF ALBUMINURIA.

BEING REMARKS MADE BEFORE THE N. Y. ACADEMY OF MEDICINE, Nov. 5, 1862.

By JOSEPH M. SMITH, M.D.,

PROF. OF MATERIA MEDICA AND THERAPEUTICS, COLLEGE OF PHYSICIANS AND SURGEONS N. Y.

As the Academy is aware that I have accepted the invitation to open the discussion of one of the topics into which the general subject of Albuminuria has been divided, viz. its therapeutics, I will now endeavor, with your permission, to discharge the duty I have assumed. And here I would remark, that I shall be unable to enter upon the discussion with any hope of interesting the Academy, or with satisfaction to myself, without, in the first place, submitting a few remarks on the pathological history and present state of our knowledge of the disease in question. Such a preface I deem necessary, in order to show the grounds upon which, I think, the treatment of albuminuria should be based.

It is justly remarked, in the preface to the New Sydenham Society's edition of Dr. Bright's Clinical Memoirs, that a great advance was made towards the true pathology of dropsy by Dr. Richard Blackall, Physician of the Devon and Exeter Hospital. The name of this distinguished physician, I believe, has not been mentioned in the course of this discussion. It deserves to be brought prominently before us. The first American edition of his work bearing the title of "Observations on the Nature and Cure of Dropsies," was published in Philadelphia in 1820. In this work, Dr. Blackall relates numerous cases in which the urine was coagulable by heat and by nitric (or, as he called it, nitrous) acid. Though this fact, as he expressly states, had been occasionally noticed by his predecessors, he remarks, in speaking of the properties of the urine in dropsical affections, that "Writers have spoken of the color of that secretion, its quantity, its sediment; and it is a circumstance hardly credible that, amidst so much minute labor bestowed on these topics, the effect produced on it by the application of heat should have been so greatly overlooked." And he further observes, that "so extraordinary a phenomenon cannot be investigated with too much care, and the distinctions which it seems capable of affording in nosology are undoubtedly not to be neglected." He also states, on high authority, that albuminous urine was found to contain hardly any *urea*. The cases of anasarca, with albuminous urine, he called inflammatory dropsies.

Concurrent with the facts collected by Dr. Blackall were the observations of Dr. Wells, "a name scarcely less illustrious than Bright or Blackall," published in two papers, in the third volume of the Transactions of a Society for the Improvement of Medical and Chirurgical Knowledge, in 1812. The first paper relates to dropsy which succeeds scarlet fever, and the second to the presence of red matter (blood ?) and serum of the blood (albumen ?) in the urine of dropsy which has not originated in scarlet fever. Neither Dr. Blackall nor Dr. Wells had noticed any constant association or connexion of albuminuria with diseases of the kidneys, or with any other internal organ.

Such was the state of our knowledge concerning albuminuria, added to which was the theory that the dropsy attending it was due to an increased exhalation or diminished absorption, or both, when Dr. Bright came forward, about 1824, and directed his sagacious and philosophical mind to the study of the morbid anatomy of different internal organs, and especially of the kidneys; and in doing so, he carefully noted the semeiotic phenomena which attended the organic lesions he found in his post-mortem examinations. While thus prosecuting his inquiries with a scrupulous regard to accuracy of observation and correctness of detail in record of cases, he arrived, by a rigorous induction, at the important conclusion, that in the forms of dropsy in which the urine is albuminous and deficient in urea, there is invariably organic diseases of the kidneys. This great truth being established beyond question, and published by Dr. Bright, in 1827, at once placed him in the foremost rank of renal pathologists, and obtained for him the distinguished honor of having his name associated with the disease he had so successfully and admirably investigated.

The discovery that urea was deficient in the urine in Bright's disease, suggested the inquiry whether that effete substance was retained in the blood. This question was satisfactorily answered by Drs. Bostock and Babington, who, after a satisfactory analysis, announced, that in albuminuria there is an accumulation of urea in the blood. "It was this," to use the language of another, "that perhaps constituted the most important part of the discovery, and which produced so great a change in the whole science of pathology. For it was argued, and with reason, by Dr. Bright, and still more earnestly by his disciples, that this inquinition of the blood was the cause of many of the morbid phenomena, such as cerebral disturbance and inflammations of the serous membranes; and thus was introduced a modified and rational humoral pathology." A more stunning blow could not have fallen on the doctrine of *solidism*, then almost exclusively received by medical men, than the one inflicted by the discovery in question.

It is noticeable in the history of albuminuria that Dr. Bright drew the picture of the disease which bears his name from phenomena presented by one hundred cases; a number no doubt sufficient to afford opportunities to contemplate, not merely the more common manifestations of the disease, but most of those which are of rare occurrence. In following up the labors of Dr. Bright, thousands of microscopes and test tubes, in the hands of experts, have been employed in exploring the more recondite metamorphoses which take place in the organism of the kidneys and in the blood and renal secretion. The symptomatology, too, of the disease has been studied by innumerable observers with a minuteness which has, it would seem, for the most part, exhausted that branch of the subject. Among those who have recently contributed to this result, we may be proud to mention the gentlemen who have preceded me in this discussion. Their labors, directed to the end of elucidating the subject, are creditable to American medicine.

In studying the therapeutics of albuminuria, I am ambitious of avoiding, as far as possible, the empiricism into which we are apt to be led in managing diseases the nature of which is obscure or unknown. It will, therefore, I trust, be excusable, if I look into the pathology of albuminuria, so far as will enable us to ascertain what are the rational indications which should govern us in the treatment of the disease.

It has already been remarked that albuminuria is but a symptom of disease. It occurs in maladies which are not Brightian in their nature. It occurs temporarily in febrile attacks, in scarlet fever, in pregnant, parturient, and puerperal women, and in various *acute* inflammatory affections, especially of the serous membranes. I use the word *acute*, for the reason that the diseases referred to are usually suddenly developed, and are comparatively violent and transitory. In such cases, the organism of the kidney is in no respect permanently changed. Abeille has published an article "On Temporary Albuminuria without Lesion of the Kidneys, occurring in a number of Morbid States."

Now in all such instances I am not disposed to regard the symptom of albuminuria as an indication of Bright's disease. Setting aside, therefore, for the present, the acute affections in which that symptom occasionally appears, we come to consider the examples in which albuminous urine is a persistent symptom, showing itself in connexion with certain local and constitutional phenomena of a chronic character. Such phenomena occur in the great majority of cases which are universally recognised as Bright's disease. But albuminuria is not a constant symptom, even in this disease. It is sometimes absent in cases in which there are symptoms unmistakably diagnostic of the malady. It is, therefore, clearly improper to call Bright's disease albuminuria.

The symptom of albuminuria, however, has a value, especially appreciable in connexion with other morbid changes in the urine. In the changes referred to, we find appearances which, with rare exceptions, are reliable diagnostics of Bright's disease. Among the more remarkable of these, are a smoky color, and diminished specific gravity of the urine, cylindrical casts, variously denominated according to their physical characters—transparent or hyaline, waxy, bloody, granular, &c. When these, or the greater part of them, are concurrent with an impairment or loss of vision and certain constitutional symptoms, among which dropsical intumescence of the face and limbs is the most remarkable, we cannot err in recognising the disease as a chronic structural lesion of the kidney.

In regard to the changes which the kidneys and the urine undergo in Bright's disease, I have only to remark, that though they have of late been so minutely investigated, I have been unable to deduce from them any principle which is important in a therapeutic point of view, or, in other words, which enables me to judge whether there is any peculiarity or modification of treatment required in the large white kidney, or the small contracted kidney, or where the casts are of this kind or of that kind, or where there is an excess of fibrous tissue, or fatty degeneration. Nor do they appear to me to settle the question whether the morbid conditions usually embraced in the term Bright's disease are different disorders or modifications or stages of one and the same disorder. But, however these things may be, we are not without sufficient data from which to deduce certain general rules of treatment, though in following them it will be found that the pathology of the disease is in advance of its therapeutics.

In respect to the etiology of Bright's disease, we know of no determinate point of inquiry from which to proceed with a rational expectation of reaching its *fons et origo.* Are the theoretical suggestions of Prof. Clark worthy of consideration? viz. that the disorder may have its beginning in a lesion of the ganglionic nerves which go to the kidneys; or travelling further back, is its source to be found in a morbid condition of the blood? These questions have a bearing on the treatment of the disease.

In reviewing the whole subject, as it now stands summarily unfolded before us, we are brought to contemplate the prominent facts, in the history of the disease, facts which were clearly disclosed by Blackall, Wells, Bright, Bostock, and Babington, viz. albuminous urine, diminution of urea in the renal secretion, accumulation of urea in the blood, and chronic disease of the kidneys. In this group of phenomena we find the substratum of the various symptomatic or secondary phenomena which are observed in individual cases. As to the diversified changes in the qualities of the urine and in the organism of the kidneys which recent observers have detected by chemical and microscopic means, it appears to me that it must at present be predicated of them that their relations to one another and to their antecedents are yet involved in obscurity Nor will they, I am persuaded, be available for practical purposes, if ever they can be made so, until some master mind shall generalize them, or rather say, unravel their complexity, show the order of their development, and interpret their significance.

It is, then, in the kidneys that the first *apparent* morbid movement in Bright's disease occurs; and all that follows arises from these organs losing the power of eliminating the effete azotised principle, urea, from the blood. This peculiar substance, when accumulated in the blood, is generally believed to act as a poison, its deleterious effects being co-extensive with the circulation. In its chemica constitution it is closely allied to the cyanogen compounds a class of bodies many of which are remarkable for thei toxical properties. Though it may be prepared artificially it is in the body a natural or physiological product, forme either from the debris of the decomposing tissues, or from certain principles existing in the blood. "Dumas ha announced with much enthusiasm the confirmation of hi views, already old, respecting the origin of urea in th animal economy, viz. that the urea proceeds from the albuminoid substances destroyed in the blood by an oxidating process. This is now established by M. Bechamp, Professor at the School of Pharmacy at Strasbourg."

But is uræmia, in truth, capable of producing the morbid phenomena attributed to it? Prof. Frerichs asserts that it is not the intoxicating agent in Bright's disease. He says that when it is accumulated in the blood it "is transformed into carbonate of ammonia under the influence of some peculiar ferment," and that the salt thus produced is the *materies morbi* in the circulating mass. It is true, the elements of urea exist in it in proportions, viz. $C_2 H_4 O_2 N_2$ which, with two atoms of water, form the carbonate in question. But whether such a transformation is common in Bright's disease, is, I think, a question by no means settled. And yet, that both urea and carbonate of ammonia may occasionally occur in the blood, the latter substance being derived mainly from the former, seems to be established by the facts collected by Dr. Braun, in his work on the "Uræmic Convulsions of Pregnancy, Parturition, and Childbed." It is, however, upon the whole, a question of no practical importance, whether the *materies morbi* be urea or carbonate of ammonia—or a mixture of both.

But, Mr. President, I must withhold any further observations concerning the nature and phenomena of albuminuria, and turn to the topic on which I am expected to remark at this time. And here I feel bound to say that I think the therapia of albuminuria has made no great advance since the days of Dr. Blackall. And, indeed, there is so little that I can offer with confidence to the consideration of the Academy, which has not already been submitted by Prof. Clark, that I trust I shall be excused, if, in the course of my remarks, I may repeat in substance some of his views relating to the topic before us.

In looking at the subject of albuminuria, as I have endeavored to survey it, it seems to me that we must regard the disease as occurring in two forms, viz. Acute and Chronic; and, accordingly, that in the treatment the following are the leading indications:

1. In the acute form, to remove the morbid conditions on which it depends.

2. In the chronic form, first, to remove the disease of the kidneys; second, to eliminate the urea from the blood; and third, to remove or prevent complications.

In regard to the indication in the acute form, it is observable, that when it occurs in connexion with ordinary phlegmasial affections, it may be fulfilled by the remedies usually employed in their treatment. When it occurs as a sequel of scarlet fever, it will commonly disappear after a limited, though a somewhat indefinite period, under the use of remedies proper for vascular excitement, and congestion of the kidneys. So also in acute dropsy, resulting from the application of cold to the surface of the body, or a sudden suppression of perspiration, a cure may generally be effected in a few days or weeks, by moderate evacuations, and especially by diaphoretics. In all such cases the kidneys suffer no violence beyond a temporary disturbance of their functions. A case of so called renal dropsy, in a highly acute form, and suddenly developed, occurred, in 1849, in the practice of Dr. Bulkley, and which I had an opportunity of seeing with him. It was treated by cups and poultices to the loins, and the internal use of the corrosive chloride of mercury. The patient, a young man, perfectly recovered, is still in good health, and is now serving in the Union army. Six years after his recovery the doctor examined his urine and found it natural.

As to the treatment of convulsions occurring with albuminuria or uræmia in parturient and puerperal women no treatment, directed immediately to the kidneys, can be of any special advantage. The uræmia, in such cases, has its origin in the adventitious condition of the patient; and though it may for a time exert a poisonous influence on the system, thus contributing to the production of eclampsia, still when under a proper treatment the convulsions cease, and the parturient and puerperal states are safely passed, the affection of the kidneys, and, of course, the uræmia will gradually terminate. It will be recollected that parturient convulsions are generally reflex phenomena, and that uræmia is but their predisponent cause; hence delivery is of primary importance in their treatment. That Bright's disease, in its chronic form, may originate from utero-gestation is not deniable; but such occurrences, if they happen, are extremely rare.

(To be Continued.)

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, Sept 24, 1862.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

(Concluded from page 44.)

UTERINE TUMOR.

Dr. Parker exhibited a uterine tumor, and gave the following history of the patient from whom it was removed. The lady was 39 years of age, fleshy, and the mother of three children, the youngest being now eleven years of age. About four years ago, while engaged in a game of tenpins, she became very much excited by her success, and, jumping around and clapping her hands, she suddenly became conscious that she had injured herself. Hæmorrhage from the vagina next came on, and though various means were resorted to the discharge continued at more or less distant intervals for a great length of time. During menstruation it amounted to full menorrhagia. Among other remedies ergot was administered, which, however, occasioned most excessive uterine pains, and continuing, more or less, for two weeks, called for the administration of powerful anodynes, and even chloroform, for their relief. During these paroxysms the physician in attendance, in making an examination, could feel the os uteri dilated, and was convinced that there was some foreign body within the uterine cavity. After the cessation of the pains there was retention of urine, and during the introduction of a catheter the physician discovered a foreign body as large as the fist situated in the vagina. A very fœtid discharge soon after took place, and when a consultation was called, in February last, the mass was thought to be malignant in its character. When Dr. Parker was called to the case, on the 17th of September, he was disappointed not to find any evidence of malignancy. He discovered a tumor of the size as stated, situated in the cavity of the vagina, tolerably well pedunculated, and not tender to the touch. Examination by one finger in the rectum and the other over the hypogastrium could not discover the existence of the uterus, and this circumstance was the only one which weighed, in Dr. Parker's mind, against the possibility of the growth being a polypus. An operation for its removal was, however, advised. During the night of the 26th inst., while straining at stool, the patient protruded the mass from the vulva. Dr. Parker, being immediately sent for, came without delay. The peduncle, which was just within the vulva, was about an inch in thickness. The tumor, as it lay between the thighs, was soft to the feel, of a spongy texture, and had the appearance as if it were strangulated. Only the anterior lip of the cervix could be felt, and the finger could only be passed into the cavity of the uterus to the depth of three-quarters of an inch, the remainder of the organ being inverted. The tumor was more developed to the left than to the right side, and at one point was very firm in texture. It was removed by the écraseur, twenty minutes being consumed in the operation. Very little hæmorrhage followed. The mass weighed about eleven ounces, and consisted of the tumor, with all that portion of the inverted womb situated above the neck. The patient has done exceedingly well since the operation, and there has been no recurrence of the hæmorrhage. Dr. Parker alluded to the great value of the écraseur in these cases, in guarding against subsequent hæmorrhage and sloughing, and in conclusion asked whether it was common for inversion to take place independent of parturition or prolapsus.

Dr. Elliot having asked if any precaution had been taken against hæmorrhage after the operation by the employment of hooks to draw down the uterus, was answered in the negative. He then stated that he had seen very severe hæmorrhage result from neglect to adopt these means. In all such cases, however, actual cautery never failed to have the desired effect. In those submucous tumors dropping down through the cervix into the vagina, he had always found the uterine sound a valuable aid to diagnosis. These tumors not being attached on one side, the uterus obeys the great law of its development under stimulation, and the instrument is thus enabled by the unequal depth to penetrate further on one side than on the other. He thought that inversion of the uterus without its being associated with a polypus of some kind, in a woman never impregnated, was a very extraordinary case indeed. He was under the impression that no such case ever occurred. The use of the écraseur was, in his opinion, open to objection, from the reason that it was apt to draw into its grasp more tissue than it ought to. He had known the peritoneum opened into in this way. In using the écraseur three years ago to remove a polypus he had first become practically familiar with this liability.

Dr. Enos stated that in a case of hæmorrhage following an operation for intra-uterine polypus, he had a very prompt effect from the use of the persulphate of iron, locally applied.

IDIOCY ; CONGENITAL HYDROCEPHALUS.

Dr. Lewis Smith presented a brain taken from a female infant, who died at the age of thirteen months; her parents are healthy, and they have one other child who is also healthy. At birth the child from whom this specimen was taken appeared well formed, and she nursed and throve like other children. Nothing unusual appeared in her condition until she reached the age when intelligence is first noticed. There were never in her case any signs of an intellect, or if any it was only a faint glimmering. She nursed when applied to the breast, and swallowed when food was placed in her mouth, but apparently without any relish. She never reached her hands towards her nurse, or towards playthings. So indifferent and apparently unconscious was she of objects around her that it was thought for some time she was blind. She never smiled, except when her hands were gently rubbed or shaken, and then the smile appeared to be more a reflex movement than from a feeling of delight. It was, however, sometimes accompanied by an utterance, and was immediately succeeded by a fixed vacant look. She usually lay with her arms crossed like the letter X, and during the last months of her life she often cried loudly, like children with cerebral complaints. Her bowels were regular, and she was not subject to vomiting before she was attacked by the acute disease of which she died. There was considerable rigidity of the muscles of the neck and a tendency to hold her head thrown back. The size of the head was rather less than usual at her age, but not less than is often seen in healthy children. The forehead was rather small in proportion to the rest of the head, but the difference was not such as to attract attention. The axis of the eyes, in the latter part of her life, was noticed a little changed, being directed upwards so as to show somewhat more of the conjunctiva below the cornea than is ordinarily seen. Fortunately her existence was terminated by the summer complaint, at the age of thirteen months. The mother was inclined to attribute the idiocy of her child to domestic troubles during her pregnancy.

Sec. cadav.—The cranium was measured, but the measurements were not recorded; they did not appear to differ materially from the normal standard. The sutures were united, and the anterior fontanelle was nearly closed, I am not certain whether it was quite. The frontal bone was a little lower than the plane of the parietal. On removing the calvarium the membranes of the brain were found occupying their usual site, but were distended with transparent serum. This was not measured, but was estimated at about two-thirds of a pint. When the serum escaped the bottom of the lateral ventricles was brought into view. There was almost entire absence of that part of the brain lying above the floor of the ventricles. On closer examination the small portion of cerebrum present was found in a thin lamina lying between the serous membrane of the ventricles and the membrane enveloping the brain. This layer of cerebral matter was thickest in front, but it could be found on all sides of the sacs. It gradually became thinner on approaching the vertex, and in most of the superior portion of the sacs the serous membrane of the ventricles and the external membranes were nearly, if not quite, in contact, so as to admit readily the passage of light through them. The cerebellum, the base of the brain, and the nerves were healthy. The brain, after being in diluted alcohol, weighed six and a quarter ounces. The mucous membrane of the colon was vascular in places, and thickened, as is always the case in the summer complaint, after it has continued a few days.

The Society then adjourned.

FOREIGN CORRESPONDENCE.

LETTER XXIII.

By PROF. CHARLES A. LEE.

MINERAL WATERS.

Baden-Baden, Sept., 1862.

> "Des Menschen Seele
> Gleicht dem Wasser!
> Von Himmel kommt es,
> Zum Himmel steigt es,
> Und wieder nieder
> Zur Erde muss es,
> Ewig wechselnd."
> *Goethe.*

Of course every traveller on the Continent goes to Baden-Baden. If you ask why, the reason given is because everybody else goes there. "Do you go to drink the waters?" "Why no; nobody ever drinks them." "What then?" "Why, to bathe and see them gamble." "Of course you never gamble?" "Never!" But, judging from the immense concourse of people constantly flocking to Baden during the summer months, one would suppose that these were the most powerfully efficacious waters in all Europe, and yet they have very little efficiency; and no one, except the resident physicians, believes they ought to occupy more than a second or third-rate place among the mineral springs of Germany. It is admitted, I believe, on all hands, that a large majority of the people who flock hither do not come on account of their health, or any benefit they expect to receive from the waters, but simply to find an agreeable residence, and pleasant, perhaps profitable, modes of killing time. The village is situated partly in a valley, partly on a hill-side, with wide streets, elegant hotels, a river running through the centre, surrounded by meadows, cornfields, orchards, vineyards, and lofty hills, clothed to their very summits with beech, oak, fir, and pine; numerous shady walks furnish beautiful promenades, while there is a public pleasure-ground, agreeably laid out in parterres of shrubs and flowers, intersected by many pleasant paths, and shaded by rows of acacia and chestnut trees.

And then there is a magnificent conversation-haus, gorgeously decorated and fitted up for *reunions*, where dancing, gaming in four different apartments, restauration, etc., are carried on on a grand scale. As it is the first time I have ever seen gambling carried on in public, by people said to rank among the highest and most respectable classes, I have for many days and evenings (for it is carried on night and day, Sundays not excepted), watched the proceedings with great interest, and I am almost tempted to give a short essay on the *hygiene of gambling*, but this would lead me away from my present object. I will, however, say, that if constant and high excitement, alternating with deep disappointment and even despair, are states of mind conducive to bodily health, then a very large number of the visitors at Baden-Baden ought to go away quite reinvigorated and rejuvenated. I apprehend, however, that quite the contrary more generally happens. When we consider that the chances in favor of the bank predominate by more than 0 per cent., both in *roulette* and *rouge et noir*, we can easily understand why the depressing passions are more influential than the exciting or exhilarating in this amusement, if such it can be called, and why a residence here for any length of time often leaves the visitor worse than it found him. It is a melancholy amusement to witness the sad infatuation which seems to possess all classes, as they crowd around the gambling-table, intent on trying their luck, and now and then to see the desperate exertions repeatedly made to carry the bank by storm. Occasional, but very rare success lures the adventurer on; he ventures deeper and deeper, and finally staking his all, retires discomfited and utterly crestfallen; and this is done constantly, though everybody knows that the bank pays annually to the government nearly 50,000 florins, for permission to keep such an establishment. Besides this, immense sums are paid every year for decorations and improvements, for salaries to the numerous gamblers employed, for lighting, cleaning, and taking charge of the buildings, besides the enormous revenue, exceeding that of many of the German principalities, which the proprietor himself receives as his portion of the profits. If the unprejudiced traveller spends many days in this place, with his eyes and ears open, I think he will be very apt to come to the conclusion that it is chiefly the resort of gamblers, the voluptuous, gay, fashionable, rich, and effeminate classes, who have more money than they know how to spend elsewhere, and who care less for their morals and reputation than they do for pleasure and gratification of the senses. It is no credit to the government of Baden, whose laws are generally excellent and its policy wise, to tolerate such a nuisance, so corrupting and demoralizing in its influence upon all classes of its citizens. The mineral waters of Baden are supplied by more than a dozen different springs or sources; all thermal, though differing in temperature; and all containing the same ingredients and in the same proportion, one only excepted. The taste is that of a weak animal broth, slightly salted, with a faint animal smell. The principal fountain goes under the name of *Hauptquelle* or *Ursprung*, "original spring," and was well known to the ancient Romans, who threw an arch over it, which still remains. The arch has a funnelled aperture for the escape of the steam, which pours out in large quantities, one portion escaping into the air, while another portion is either condensed or conveyed by pipes into the adjoining building, where it is employed for vapor baths. Where a sulphur vapor bath is prescribed, a small quantity is thrown upon coals or a heated iron. The temperature of the water is 7° Cen., or 153° Fah. It issues from a crevice in a hornblende rock, and is received into a vast reservoir, whence it is carried in pipes to the *Trinkhalle*, or pump-room, on the other side of the valley, an elegant building, with a splendid peristile, ornamented with fine paintings in fresco, and serving as a promenade. The water is here drunk, if anybody chooses to take it, which is very seldom; nearly all the other mineral waters of note being kept here in bottles, and these are usually preferred. The water is perfectly limpid, with a slightly saline but by no means disagreeable taste, and has for its principal constituent chloride of sodium. There are also very small quantities of lithium, the chlorides of magnesium and potassium, and the sulphate and bicarbonate of lime.

Considering the small quantity of mineral constituents in these waters, it is obvious that they cannot possess any great activity; and it is very probable they act as much by their temperature as their composition. They contain but very little carbonic acid gas, and not half the amount of saline substances as the waters of Wiesbaden, their temperature also being considerably lower. All the hotels are furnished with bathing-rooms, conveniently fitted up in the basement, into which the hot water is conducted by pipes. Very few invalid-looking people are to be seen at Baden, while Homborg and Wiesbaden abound with them. This proves that no great confidence is placed in their efficacy. Indeed, the physicians of the place seldom prescribe them alone; as the water is slightly stimulating, and of an agreeable temperature, it forms a safe and pleasant bath, and is recommended not only as a luxury, but also in rheumatic and paralytic cases in persons of nervous or highly excitable temperament. They are also advised in cases of neuralgic pains, accompanied with general irritability, disordered condition of the skin, or of the alimentary canal. They are said also to do good in nervous affections of a convulsive nature, as hysteria, with congestion of internal organs, and irregularity of the menstrual function; also in dyspeptic complaints, with a vitiated condition of the secretions, acidity, pyrosis, etc. But it is very doubtful whether any more benefit accrues from baths of these waters in the above cases than from those of pure water of the same temperature. Those who do drink these waters either add some other water or salt to it, such as the Carlsbad salt (sulph. and carb. of soda), or a large quantity of goats' milk. But the great proportion of visitors never drink them at all, but other mineral waters, of which over 20,000 bottles are annually consumed in the *Trinkhalle* of this establishment. Douche-baths of the water are also employed to a very considerable extent, and often with good effects. On standing a short time, this water presents a slight whitish scum upon the surface, which is the carbonate of lime. It is said also to contain a small quantity of sulphur, and that vegeto-animal matter which has recently been discovered in other hot springs. The lowest temperature of any of the springs is 117 of Fahrenheit; the Hallenquelle, or imperial spring, contains considerable carbonate of iron, and is the only spring here which does contain any.

Baden contains some 6000 inhabitants, and four or five times that number are annual visitors. As a place for a permanent residence it possesses no extraordinary advantages; provisions, it is said, are not very abundant; as soon as the season is over the numerous booths are closed, and none but the most necessary and common articles can be obtained from the shops. As to climate it seems to be well sheltered by the surrounding hills against cold winds; but owing to this cause, and the abundance of rain and dew which fall in the autumnal months, it has the reputation of being chilly and damp. The surrounding country certainly abounds in scenery of the most beautiful and picturesque character. I have nowhere seen a more beautiful road, both for pedestrians and carriages, than that which leads up to the Convent of Lichtenthal, two miles distant, shaded all the way with lofty oaks, chestnuts, and elms. The old castle, now in ruins, which stands near the summit of the high hill which shelters the town on the north, constitutes one of the finest and most prominent features in the view from the valley, and is reached by a good road leading through the woods. The chateau and grounds of the Grand Duke are in the immediate neighborhood, and present a charming appearance. The streets are well paved and kept scrupulously clean, while the hotels furnish as elegant and comfortable accommodations as can be found in Europe. There is hardly a more beautiful view to be had anywhere than that from the hill on which the Castle stands, commanding, as it does, a prospect of the fine and fir-covered mountains of the Black Forest on the one side, and the rich plains extending to the Rhine on the other; while, between, every part of Baden is directly beneath the eye. In the distance towers the lofty and elegant spire of Strasburg Cathedral.

The last report of the Government Inspectors of Mines tells us that for every 74,674 tons of coals raised a human life is sacrificed.—*Brit. Journ.*

American Medical Times.

SATURDAY, JANUARY 31, 1863.

INCREASE OF HOSPITAL RATION.

Congress is again engaged in medical legislation. We have already noticed the passage of an Act creating eight additional medical inspectors. The following Bill was recently introduced into the Senate, which contemplates giving still more effectiveness to the medical service. It is entitled, "*A Bill to provide for the greater comfort of sick and wounded soldiers, and to promote the efficiency of the Medical Department of the army.*"

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That hereafter the rations of soldiers in the hospitals shall be commuted at *thirty cents per ration*,* which commutation shall be retained by the Commissary Department as a credit to the hospitals, to be expended in the same manner and for the same purpose as the hospital fund is expended under existing regulations.†

Sec. 2. *And be it further enacted*, That there shall be added to the present Medical Corps of the army, one Assistant Surgeon-General, two Medical Inspectors-General, twenty Surgeons and forty Assistant-Surgeons, to be promoted and appointed in accordance with the existing laws: also ten Medical Storekeepers, and as many Medical Cadets as the Surgeon General may deem necessary for the public service.

Sec. 3. *And be it further enacted*, That so much of the first section of the act approved June 30, 1834, entitled "An act to increase and regulate the pay of Surgeons and Assistant Surgeons of the army," as requires Assistant Surgeons to serve five years as such before being eligible for promotion to the grade of Surgeon, be, and the same is hereby, repealed.

Sec. 4 *And be it further enacted*, That in the organization of army corps, each corps shall have, in addition to the staff authorized by the existing laws, one Medical Director, who shall be assigned thereto from the army or volunteer force by the President of the United States.

Sec. 5. *And be it further enacted*, That the chief Medical Director of departments and armies in the field and the Senior Surgeon on duty in the Surgeon-General's Office, regularly so assigned by the War Department upon the detail of the Surgeon-General, shall have the rank, pay, and emoluments, each, of a colonel of cavalry.

Sec. 6. *And be it further enacted*, That in addition to the number of Surgeons and Assistant Surgeons of the volunteer force, as authorized by the existing laws, there may be appointed fifty Surgeons and two hundred and fifty Assistant Surgeons.

Sec. 7. *And be it further enacted*, That the officers authorized to be appointed by this act, and the medical inspectors authorized by the act approved 27th December, 1862, may continue to serve as such during the present rebellion, and no longer: *Provided, however*, That the officers appointed under these acts from the medical staff of the army shall retain their respective rank therein with such promotion as they would have been entitled to if they had continued to serve in the said staff.

Three conditions are secured by this Bill:—1. An increase in the value of the hospital ration; 2. An increase of rank to certain officers, and—3. An increase in the numerical force of the staff. All these amendments of the present law are of the utmost importance, and ought to receive the unqualified approval of every well-wisher of the army. In the present and future numbers we propose to discuss some of the leading features of this measure.

The present valuation of hospital rations is altogether inadequate to supply the various dietetic wants of the sick soldier. It is only by practising the greatest economy that a hospital fund is secured even to hospitals best adapted for that purpose. It is only the very sick, and that too of medical diseases, that will not consume the value of eighteen cents per diem of food. But the majority of the inmates of military hospitals are suffering from mild diseases, or gunshot wounds, and in the vast majority of cases have rather an increased than a diminished appetite. And especially do they require all those articles of an extra diet which command the highest prices. Civilians regard the allowance of but eighteen cents a day as the value of what even a sick man would require, as absurd. And it certainly is, except perhaps in western districts, where food has a merely nominal price. It is true that hospitals do acquire at this valuation of rations a fund; but too often it is by curtailing the full and extra diet to a most undesirable extent. We could instance hospitals which are well managed, and yet which must inevitably gradually sink into debt if they follow a liberal diet table, because they are filled with hearty convalescent but disabled patients, and being in the vicinity of large cities must obtain their supplies at costly markets. What gives special importance to this section of the Bill is the fact that the Surgeon-General has introduced a new and more liberal diet table into the hospitals. If this table is finally adopted, and we hope it will be, there must be adequate provision made to meet the additional expenses, or it cannot be carried out in many hospitals.

We regret to notice, that in the discussion of this section of the Bill in the Senate, loose crimination of the medical department was indulged in by several Senators. No specific complaints were made; but it always seems to be taken for granted that where there is a medical element in the service there must be delinquencies against which a wise statesman must protest, or a blunder upon which an apt orator may safely perpetrate a joke. But these contemptuous flings might be passed over, did they not lead to most unrighteous legislation. The Medical Department being under accusation, is at once open to the suspicion of mismanagement, and there is no limit to the allegations that are brought against it. And yet we can assert on the most undoubted authority that no branch of the army service contains an equal number of reliable, intelligent, and efficient members with the medical; nor is there another department that contributes as much either to the physical or effective strength of the army. But because its labors and sacrifices are unobtrusive they are invariably overlooked, and the demands for increased facilities for usefulness are regarded with distrust.

Passing over this irrelevant matter, it is a source of astonishment that intelligent Senators, living in a city of hospitals, where the very atmosphere is thick with complaints of insufficient diet, could assert, as did Mr. Fessenden, that there is no "cause of sufferings in the hospitals!" Do they believe that in Washington a convalescent may be restored to confirmed good health on food purchased at eighteen cents per diem? Senator Grimes had the assurance to assert that the present rate is sufficient, resting his belief on the flimsy assertion that certain contractors could even make money in furnishing the hospital supplies at this rate. He seems to have forgotten that this money was made at the expense of the poor invalid's daily food. Senator Ten Eyck's remarks were, we fear, nearer the truth: "In some cases the meat set before the sick soldiers was not fit to eat, and he believed that many had actually died from lack of proper food."

The burden of these senatorial speeches was—economy; and such is too often the plea when appropriations are required by the Medical Department. It is remarkable that Congress should be no more a reflex of the popular feeling in this country in regard to the care of the sick than is the British Parliament. While the people pour their treasures nd contributions gladly into the lap of the Sanitary Commission, in an uninterrupted stream, to be applied to the wants of the sick, SENATORS are greatly exercised by a proposition to raise the hospital supply of food above the point of starvation, and determine that in this particular, at least, economy shall be practised. We can only wish that Congress would practise that true economy which, by the liberal upply of the wants of the sick, restores them quickly to active service.

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* The value of the ration now is only *eighteen cents*. Had it not been for the voluntary contributions received from the North, this sum would not have sufficed to feed the soldiers.

† On motion of Mr. Collamer, the provision for increasing the commutation of rations was stricken out, and a section substituted, authorizing the Surgeon-General to procure such articles as may be necessary for the proper diet of sick and wounded soldiers.

THE WEEK.

THE homœopaths have again appealed to Congress to experiment with infinitesimals in the treatment of sick soldiers, and the Committee to whom their petition was referred has asked to be discharged from its consideration. It was not surprising that homœopathy should clamor for recognition while a homœopathic commanding general was its patron; but now that he is superseded, and the medical taff is being thoroughly purged of all its incompetents, it s remarkable that the advocates of this delusion should presume to ask admission to the medical service. They would, f admitted, meet with a summary dismissal.

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DR. MORTON, the alleged discoverer of the application of ether to practice, has again appealed to Congress for compensation for the use of this agent in the Army. It will be emembered that a similar claim was pressed through both houses several years ago, but failed to obtain the President's signature. Dr. Morton subsequently appealed to the medical profession for relief, and large sums of money were freely subscribed in Boston and New York towards a national testimonial. Recently the patent expired, and a renewal was refused. Dr. M. then instituted a suit against the N. Y. Eye Infirmary, but failed to establish the right of prosecution. He now returns to Congress, and renews his petition for compensation. If he was ever entitled to anything the Government should be the donor.

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THE Medical Society of New Jersey held its ninety-seventh annual meeting on the 27th and 28th of January, at Jersey City. The President, DR. WOLVERTON, of Trenton, was in the Chair. The different district Societies were well represented, and the proceedings of the session were highly interesting and instructive. Delegates from the Connecticut Medical Society, DRS. LINDSEY and JACKSON; and from the Pennsylvania Medical Society, DR. WALLACE, were warmly welcomed by the first Vice-President of the Society, DR. T. R. VARICK. The officers chosen for the ensuing year are, *President*, DR. T. R. VARICK; 1st *Vice-President*, DR. E. M. HUNT; 2d *Vice-President*, DR. A. COLES; *Corresponding Secretary*, DR. T. J. CORSON; *Recording Secretary*, DR. WM. PIERSON.

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WE desire to call the attention of the profession of the State of New York to the annual meeting of the State Medical Society, to be held during the coming week. In another column the Secretary, DR. WILLARD, has presented the claims of the Society in forcible language; and it is to be hoped that members from every section of the State will respond to its appeal, and be in attendance. Now that the American Medical Association has ceased to hold annual meetings, it becomes doubly important that State organizations should be maintained.

Reviews.

THE PRINCIPLES AND PRACTICE OF OBSTETRICS. By GUNNING S. BEDFORD, A.M., M.D., Professor of Obstetrics, the Diseases of Women and Children, and Clinical Obstetrics, in the University of New York; Author of Clinical Lectures on the Diseases of Women and Children. Illustrated by four Colored Lithographic Plates and ninety-nine Wood Engravings. Third Edition, carefully revised and enlarged. New York: William Wood. pp. 770.

THE "Principles and Practice of Obstetrics" is destined to have a wider popularity and a more rapid sale than the same author's work on the "Diseases of Women." But about a year has elapsed since the issue of the first edition, and now we have the third! But more gratifying to the author than successive editions must be that high appreciation of his work, which has led American teachers of Obstetrics to adopt it as a text-book. Already no less than nine Schools have selected PROF. BEDFORD'S "Principles and Practice" as their text-book in Obstetrics. The example of the teachers of Midwifery is commendable, and should be followed by all American medical teachers in the selection of text-books. If we are ever to have a literature of our own, we must encourage both author and publisher when the production is worthy of patronage. The present edition has been revised and enlarged, and a lecture on phlegmasia dolens is added. It is brought out in a style highly creditable to the publisher.

Correspondence.

MEDICAL SOCIETY OF THE STATE OF NEW YORK.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—I desire, through the columns of the MEDICAL TIMES, to draw the attention of the profession to the fifty-sixth annual meeting of this Society, which will be held in the city of Albany, on the 3d, 4th, and 5th days of February, and to remind the profession of its obligation to see that the annual meetings are well attended. This institution is the organ through which the profession should speak in its wisdom to the State and the nation. It is the medium through which its influence is already widely and favorably known. The Society has a reputation which extends not only through the length and breadth of the land, but it is deservedly well known abroad. In point of reputation, while medical science is yearly becoming more elucidated, the Society cannot stand still. Its reputation must be sustained, or it falters and loses the position it has already acquired. It is an institution in which every practitioner in the State ought to be interested, and for which he ought to labor. Instead of finding fault that the State has done so little to mark the distinction between its educated and uneducated physicians, and carping about the evils of quackery, the time would be better spent if the profession availed itself of the advantages the State has already granted to it, and by a persistent and united effort showed to the world through the transactions of this Society its superior skill and learning; if, instead of asking honors or privileges from the State more than are already possessed, it bestowed honor upon the State by its yearly contributions through the Society's Transactions, to its scientific and literary publications. The yearly edition of the Medical Transactions, issued by the State, is about five thousand copies. By zeal and merit the whole profession have access to its pages. If the full talent of the State were enlisted in this publication, as it assuredly ought to be, the volume might be made one without rival in this country or any other; and the State might justly regard with still higher pride the Institution she so generously fosters.

There is no State Document more eagerly sought for than the Medical Transactions, and they can be made still more attractive.

There is danger, in the present melancholy and excited state of the country, that the interests of this Society at its approaching meeting may be neglected or forgotten. This certainly ought not to be. Many valuable facts have been gathered within the last year, both in reference to surgical and sanitary science, that ought to find permanent record, and I trust members and delegates will feel duly interested in presenting them to the Society. Let the papers be promptly and carefully prepared. Already several papers of interest are promised. One of the most interesting features of the meeting will be the address on Wednesday evening, by the President, Dr. Hun, who is one of the most accomplished scholars and polished writers in the medical profession in this country.

Delegations are expected from three or four adjacent State Medical Societies, and the meeting promises to be one of great interest. Permanent members and delegates will please be punctual in attendance.

Yours, &c., Sylvester D. Willard, M.D.,
Secretary.

Albany, Jan. 26, 1863.

Army Medical Intelligence.

REMARKS ON REGIMENTAL AND HOSPITAL DUTIES.

[Army Correspondence of the American Medical Times.]

Baltimore, Dec. 1862.

As I have been in the habit of occasionally transmitting to you the results of observation and experience, as afforded in the professional duties of civil life, it may not be less acceptable to you that I should notice some points of interest illustrated on the broader and now more attractive arena of military practice. The medical embarrassments of the camp are, in some respects, quite different from those which confront us in more private duties. The surgery must be like that of Walter Smith, ready-witted, ingenious, ready for an emergency, rather than that which manipulates amid all the appliances which art and home comfort can furnish. The practice must be that which can use to the best advantage articles on hand, and judiciously suit treatment to circumstances, rather than that which goes by the book, with an apothecary at hand to put up elegant prescriptions. The war will develop two classes of practitioners; one class will be made eminently practical, and feel more than ever that confidence in nature, well-balanced judgment, and good plainly-applied common sense, making up three-fourths of a good physician or surgeon. Another class, who will pride themselves in quick prescription and hasty operation, and will learn to give direction to the prognosis without any special regard to diagnosis. The wise and faithful surgeon amid the scenes of camp life, has most important general duties to perform. If equal to his post, he is not long in the tent before he rises from the position of a prescriber to that of a sanitary manager. His business is the physical welfare of his troops, and more than at home he is to be on the look-out for the antecedents of disease. Military rules give him all necessary power to enforce correct measures, and the habits of the men, the kind of food they eat, the times when they eat it, the places where they sleep, the order of their tents, the general position of the camp, the frequency of changes of underclothing, the kind of water drunk, and many like points, will early engage his attention. If, as is the case of tens of thousands of our troops, the movements are not frequent or rapid, he will see to it that the laundry does its duty, that a house or room is obtained in the vicinity where each company, in order, may take a warm-bath every two or three weeks at least, and will in one way and another be busy in preventing that unhealthiness of skin and that disorder of stomach which are avoidable, and yet cause the vast majority of the sickness of the army. Alas, few think of or act in these matters.

Then the condition of the regimental hospital is a matter of great importance. The usual regimental tent is good where a house cannot be easily procured, but it should always be well secured, having a southern aspect, with an additional thickness on the north; a floor which can generally be procured by a little earnest effort and ingenuity, and an arrangement of the beds, or position of the patients, such as shall not bring them into too near proximity. The best heating arrangement is to have a tent, near the entrance to which you have a wood-stove, or one made by digging a hole in the ground of stove-shape; then a pipe running along the ground through the tent, to the chimney at the rear made of earth or barrels "with heads out," placed one above the other; the flooring can be so arranged as to leave an open space above the pipe. Thus dampness is prevented, and an equable temperature secured. A clean bed and clean underclothing is the first prescription.

One of the first medical points that attracts the attention of a visitor of regiments is the error made in the mode of selecting soldiers. Notwithstanding your Journal, as well as other medical publications, earnestly called attention to the matter before the recent regiments were formed, the anxiety to escape the draft has made the material worse than before; and I may say, thousands are now asking, and many of them needing discharge, who have never done three months' service in the field. It is lamentable to hear the statements of men as to how they were examined, in some cases three hundred per day by one doctor, and the result is that at immense expense, and with bad example to other men, they must be a drawback on the army. Where the cases are perfectly plain it is, of course, best to hurry them homeward with all possible despatch.

Ezra M. Hunt,
Assist. Surgeon, 29th New Jersey Vols.
In Charge of Calvert Hospital.

ORDERS, CHANGES, &c.

Surgeon E. H. Abadie, U.S.A., having been relieved from duty as President of the Army Medical Board at Philadelphia, Pa., has returned to the Military Academy at West Point, N. Y., and resumed his duties as Post Surgeon.

Leave of absence for twenty days has been granted to Surgeon S. Walker, 121st New York Vols, and for thirty days to Assistant Surgeon Bowman Hendry, 4th New Jersey Vols.

So much of General Orders No. 4, current series, Adjutant General's Office, as dismissed Surgeon Thomas Sim, U.S.V., has been revoked, and he has been reinstated in his position.

Several of the General Hospitals at Frederick, Md., have been closed, there being no further use for them.

Surgeon S. F. Elliott, U.S.V., has been assigned to duty with the troops at San Fernandina, Fla.

Surgeon R. B. Bontecou, U.S.V., has been assigned to duty as Chief Medical Officer, Port Royal Island, S. C.

Surgeon T. H. Bache, U.S.V., having, in obedience to orders, reported at the Headquarters of the Army of the Potomac, has been placed on duty as Medical Inspector, 1st Army Corps, Left Grand Division, Army of the Potomac.

Surgeon W. H. White, U.S.V., has been relieved from duty with the Centre Grand Division, Army of the Potomac, and has reported for duty on the Staff of General Patrick, U.S.V., Provost Marshal, same Army

Leave of absence for thirty days has been granted to Assistant Surgeon Baker, 95th New York Vols.

Surgeon G. S. Palmer, U.S.V., has been assigned to duty at the Lincoln Hospital, Washington, D. C.

Surgeon J. C. Lyons, 64th Pennsylvania Vols., has been transferred to the 56th Pennsylvania Vols., and Surgeon J. W. Junkin, 56th Pennsylvania Vols., to the 64th Pennsylvania Vols., and Assistant Surgeon B. F. Taft, from the 20th to the 19th Massachusetts Vols.

Ass't Surgeon E. Munk, 20th Wisconsin Vols., has been mustered out of service, for want of capacity as a Medical Officer.

So much of Special Orders 359, series of 1862, from the Adjutant General's Office, as dropped from the rolls of the Army, Assistant Surgeon J. A. Armstrong, 73d Pennsylvania Vols., has been revoked, and he is restored to his command, provided the vacancy has not been filled.

Medical Inspector E. P. Vollum, U.S.A., has been assigned to the Army of the Potomac; Station, when not on inspecting duty, Washington, D. C.

Medical Inspector W. H. Mussey, U.S.A., has been ordered to visit in his capacity as Inspector, the camps, hospitals, and fortresses of the Department of North Carolina and the South.

Surgeon W. D. Stewart, U.S.V., now on duty at David's Island, N. Y., to report for duty to the Assistant Surgeon-General at St. Louis.

Surgeon George L. Pancoast, U.S.V., to report for duty as Medical Director, 3d Army Corps.

Surgeon W. Hayes, U.S.V., to report in person for duty to Surgeon J. Simpson, U.S.A., Medical Director, Baltimore, Md.

Original Lectures.

LECTURES ON MILITARY SURGERY.

DELIVERED AT THE
COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.
By WILLIAM DETMOLD, M.D.
PROFESSOR OF MILITARY SURGERY AND HYGIENE.

LECTURE VI.

General Treatment of Gunshot Wounds.—Wounds of the Head, Face, Spine, Neck, and Thorax.

Gentlemen—After you have cleaned a gunshot wound of foreign bodies the treatment is exceedingly simple, and resolves itself, in the majority of cases, in the fulfilment of the following indications, viz. absolute rest, keeping down inflammation by cold fomentations, the relieving of pain by opiates, and the supporting of the system to enable it to go through the necessary process of suppuration.

1st. As to absolute rest. The position of the wounded part should be comfortable to the patient, and at the same time be such as to favor the discharge of the secretion from the wound; a wounded limb should never be in a dependent position, which would favor venous congestion, but should, if possible, always be a little above the horizontal level of the rest of the body.

2d. Cold fomentations. All experienced military surgeons of modern times agree that, as a general rule, this is the best local application. How it is made, whether as Stromeyer and his son-in-law, Esmarsch, advise, by placing the limb in a cold water bath, or upon tin vessels adapted to the shape of the wounded part, and filled with ice water, or by a bladder filled with ice, and, to prevent pressure, suspended over the wound so as just to touch it, or by irrigation, or simply by cold compresses, matters very little; the latter, as the simplest form, must always, and of necessity, find preference in large military hospitals, and answers every purpose, provided the compresses are sufficiently often renewed. We meet, however, occasionally with wounded to whom cold applications are disagreeable; and as to a certain extent the feelings of the patient furnish ndications which a prudent practitioner never entirely disregards, tepid or warm fomentations may then be substituted for the cold; in that case thick compresses dipped in warm water are the best. Warm poultices should be discarded from military hospitals; there is no medicinal virtue n flaxseed or slippery elm or the like, the warmth and he moisture are what we want, and that we get by a warm compress. Poultices are troublesome, expensive, and favor uncleanliness. Where there is a tendency to gangrene the cold must be changed for stimulating applicaions; of this we shall, however, speak more fully when we ome to the subject of gangrene.

3d. Pain, which in some cases of gunshot wounds is xcessive, should be relieved as much as possible, not only om simple motives of humanity, but because it exhausts erve power, prevents sleep, and besides frequently disturbs he other inmates of the ward. It is a fortunate circumtance that wounded will almost invariably bear opiates well, and this tolerance seems to increase with the amount f pain or with the necessity for their administration. The st form in which opiates are to be administered is the olution of morphine, the dose of which can be readily egulated. Opium pills are more adapted to cases of diarhœa. Frequently the local application of dry morphine o the wound will give great relief.

4th. For the support of the system we must mainly deend upon nourishment with wine, brandy, or beer. Quine is an excellent adjuvant, although by itself it will not stain the system; all its virtue consists in stimulating the omach and giving an appetite; we therefore do not quire such large doses of the drug as when we adminisr it in miasmatic diseases. Cod-liver oil is much more of nutriment; it is an animal fat, very easily assimilated, and therefore in cases of protracted suppuration eminently useful, and may be advantageously combined with quinine; still you must always bear in mind that good food, where it can be had, and the patient will take and digest it, is the best supporter of the system, and no drug is of sufficient importance to persist in its use when it disturbs the stomach and takes away the appetite.

You see, gentlemen, that the general indications for the treatment of gunshot wounds are exceedingly simple, and within the grasp of the most moderate intellect; but it requires the soundest judgment, guided by experience and fortified by the careful study of results obtained by others, to decide upon the various surgical operations which may become necessary in gunshot wounds.

Gunshot wounds of the head, especially where the bones of the skull, and still more so where the encephalon with its membranes are involved, are always of a grave character. A good authority, I think Guthrie, says: "no gunshot wound of the head is so slight that the surgeon should not feel anxious about it, and none so grave that he should give up all hope." Of scalp wounds I have already spoken while speaking of the duties in the field, and I then stated to you that no portion of the scalp, however far detached, should be cut away, and that you should be sparing with sutures. The great danger of wounds of the head depends upon the proximity of the dura mater and brain, and the great facility with which inflammation will spread to them; all wounds of the head require, therefore, vigorous antiphlogistic treatment, rest, avoiding of all stimuli, bodily as well as mental, low diet, ice to the head, and brisk purgatives.

The removal of balls, loose bone-splinters, and foreign substances, must be performed with the utmost care, to avoid further injury to the brain; and in many cases good authorities deem it prudent to wait till suppuration has set in, especially in those cases where as yet no brain symptoms are manifest. In former days trephining was resorted to in all cases of injury to the head with depression, even as a precautionary measure. Modern surgery is much more judicious, because less meddlesome. Lift up carefully with the elevator depressed pieces of bone, but avoid as much as possible increasing the danger of the patient by trephining—an operation dangerous in itself, and which, as a precautionary measure, that is, where no brain symptoms exist, is now by the best authorities entirely discountenanced.

Wounds of the spine are of the gravest character, especially where paralysis of the parts below the wound shows that the spinal marrow is involved in the injury. Their danger to life is in proportion as they are higher up or lower down. We can do but very little, and I do not now recollect a case where operative interference for the removal of the ball or the fractured portion of the vertebræ pressing upon the spinal marrow has been crowned with success. We must act upon general principles, make the patient as comfortable as we can, draw off the urine by the catheter, try to prevent decubitus, which is apt to occur, because the parts have lost their utility, and because the fæces are passed involuntarily. I need not say that on that account the strictest attention to cleanliness is indispensable.

Gunshot wounds of the face, although they may at first sight look appalling, are generally not dangerous; remove no portions of the bones, but replace them in position; loose teeth you may take away; the external wound, if much lacerated, unite carefully with sutures, and apply cold fomentations. Where the jaws are fractured, you may be obliged to nourish the patient through a tube, introduced either through the mouth or nose, and through which you inject nourishing soups into the stomach. Wounds of the face are apt, in consequence of division of the facial nerve, to leave paralysis of the parts supplied by it. A man was wounded in one of the battles in the Mexican war, the ball passing through the mouth and breaking the upper jaw, and passing out below and behind the lobe of the ear; he recovered, but retained paralysis of that side of the face, the facial nerve having been divided near its exit through the foramen stylomastoideum; he suffered intensely in consequence of the paralysis of the m. orbicularis palpebrarum; the eye being constantly wide open, the ball could not be cleared of dust by the winks of the lids, the cornea became vascular, in short, his sufferings on this account were so intense, that he applied to me to have the ball of the eye removed. Instead of that I drew down the upper lid, made a semilunar incision below the infra-orbital margin, and divided the m. levator palpebræ superioris, which, in consequence of the paralysis of its antagonist, the orbicularis, had been firmly contracted, so that the man had even lost the chance of rolling his eye up under the upper lid, as we find it in ordinary cases of paralysis of the face. The operation was entirely successful, the upper lid dropped down, and the man generally acquired a very good use of his eyelids, which followed the motion of the lids of the other side, the vascularity of the cornea disappeared, so that the man by this simple operation was not only relieved of his sufferings but retained a good eye, with which he sees to this day.

Wounds of the neck require, if possible, the removal of the ball, which is otherwise apt to descend along the muscles to the mediastinum, or lodge upon the apex of the pleura; you should make openings for the exit of matter at the lowest part, to prevent the discharge from descending. If the larynx is wounded, and in consequence of closure of the rima glottidis suffocation be imminent, you must perform tracheotomy, and let the trachea tube be worn until the inflammatory swelling has subsided, and respiration can be carried on again by the natural passage; you will readily ascertain this by the removal of the inner tube and the closure of the external opening of the outside tube which has an opening towards the larynx.

While speaking of the duties in the field, I have already told you what is to be done in penetrating wounds of the thorax, with regard to closing the wound or leaving it open. Strict antiphlogistic venesection, or, as I have recommended to you, temporary tourniquets to the limbs, absolute rest, lying on the wounded side, embrace the main outlines of the treatment. If percussion and auscultation give evidence that the sac of the pleura is filled with blood, pus, or pleuritic exudation, paracentesis of the thorax may become necessary, and will relieve the patient.

Original Communications.

THE PRESENT
STATUS OF PSYCHOLOGICAL MEDICINE.

By I. PARIGOT, M.D.,

LATE COMMISSIONER IN LUNACY AND SUPERINTENDENT OF GHEEL, BELGIUM, PROPRIETOR OF A PRIVATE INSTITUTION AT HASTINGS ON THE HUDSON, NEW YORK.

PSYCHO-MEDICAL JURISPRUDENCE.

CURIOUS facts disclose almost every day the different defects in our system of dealing with insanity in judicial courts. The opening of a book or paper on forensic cases of lunacy shows sufficiently what we have to study and reform in this important branch of medicine. The quarterly retrospect of the *London Medical Critic* contains, in the last number, several cases which are examples of our want of rational proceedings in courts, when alleged insane prisoners are to be tried. Does justice require disputes on abstruse points, nicely made; or brilliant arguments from parties, who sometimes plead a system for reputation or money? Not at all; human justice requires only the simplest means of arriving at the truth.

The first reported case in Dr. Winslow's journal is that of a man who killed his own child and was tried at Gloucester. The jury declared him *not guilty on the ground of insanity.* Some medical men, who had been referred to, were not present at the trial, owing, it was said, to the poverty of the prisoner! Such want of humanity is certainly a rarity in our profession, and the shame of it falls entirely on those who thus neglected their duty. We do not understand why these gentlemen were not brought to the bar or punished for their disobedience. Now the Secretary of State, who ought perhaps to have ordered a medical examination *before* the man was committed, was under the necessity of doing so *afterwards;* in consequence of which, two physicians (we do not know whether they were experts or not) reported that they could not discover any symptoms of lunacy. The conflict between a verdict on a point of insanity, and a medical decision on the same, is embarrassing, and involves either an injustice or an absurdity; nevertheless it appears to us that the jury acted wisely in the absence of medical experts. The judge observed that the evidence of insanity was but slight. Still the jury, from fear of mistake, declared the prisoner insane. Such wisdom was not evinced by a jury in the celebrated case of George Clark, who committed murder at Newcastle-upon-Tyne, being evidently a dangerous maniac. When the prisoner was at the bar he was still incoherent and suffering from delusions! Nevertheless he was found guilty, and the judge, who showed little knowledge of the human mind, contented himself in passing the sentence of death with the remark that, "he was a person of *eccentric character* beyond other men." Another judge, summing up, at Belfast, the case of a W. Hardman, who had killed one of his relatives, said that "the fact of his keeping bottles of poison round his neck was more than eccentricity." It is remarkable that these learned judges had never met with men of talent who were *eccentric* persons (comparatively with what the French call *le commun des martyrs*, and we *vulgum pecus*) and still of a sound mind, and that they could not distinguish the eccentricities of a madman, which are mere symptoms of a disordered mind. But unfortunately it will require a long time before psychology will be understood; we have tried to forward the study of *moral insanity* in criminal cases with little hope of having done any good. There is now a learned justice, Baron Alderson, who, addressing a jury in a capital case, employed an undignified joke, viz. "*that an incontrollable impulse* to commit crime was to be followed by an equally incontrollable impulse to punish."

Considering all these proofs of ignorance, we really believe it a monstrous power given to juries to decide difficult points of science. Innumerable errors, here and abroad, show that insanity or responsibility are too often pronounced at random.

Undoubtedly trial by jury is one of the most sacred of human institutions; a juror is certainly, in many cases, a good judge OF FACTS; and he wants no other light but his conscience to decide whether they exist or not with their intents and purposes. But for the appreciation of SCIENTIFIC FACTS, he ought to possess qualities which only belong to those who have a special education. In the ordinary business of life one may easily suppose that a verdict is generally good or very near the truth; but in scientific questions, unless the jury was a special one, the reverse is true, that is, error is the rule, and truth the exception.

The utter absurdity of a verdict of a jury was demonstrated in a very witty letter addressed to the editor of the *London Times* by a *Puzzled Practitioner*, who, from a certain verdict, was obliged to infer:

1. That in any case of delirium or mania it is unsafe fo a medical man to attend UNLESS summoned expressely by the patient himself.

2. That when attending, it is unsafe for him to employ any means of restraint WITHOUT first obtaining the consen of the patient himself.

3. That on neither of these points is the authority of th patient's wife or relatives sufficient to guard the medica attendant from legal consequences.

4. That between insanity and delirium tremens a broa line of demarcation must be drawn. A person, in the latte

condition, being incapable of injuring either himself or others, etc., etc.

We have already animadverted in articles in this journal on the case of an idiot (Wyndham's case) who was considered by a jury able to manage his fortune and take care of himself after having lost, on account of his infirmity, both character and position in the world; we might record similar or analogous cases in Belgian, French, and German courts; suffice to say that the actual jurisprudence of insanity is so much behind a tolerable knowledge that certain lawyers of talent are able to gain any cause and reverse the means they have employed to continue their success in opposite cases. Mentioning this fact myself to a celebrated member of the bar with proofs in hands of his multifarious victories, he said, "That it was unfortunately a necessity sometimes to do so."

The fundamental principle is to know whether or not responsibility exist in a criminal case, or if, in civil cases, the intellectual faculties of a person are sufficiently developed to permit the exercise of civil duties and functions; for this the medical expert has not to occupy himself with jurisprudence or even its defects; let him only attend to the natural phenomena which are necessarily united to moral symptoms of the mind, and his duty will be accomplished. Responsibility and the capacity of judging are individual qualities; they are not only different amongst men, but even the first may differ according to the tenor of the laws themselves; the possibility of distinguishing right from wrong (libertas judicii) depends upon the state of the subject, whereas the faculty of judging of one's actions in accordance with the existing laws (libertas consilii), though subjective in point of mental health, is objective in relation to circumstances.

Everything in the United States is disposed for a reform of the civil and criminal procedure. Liberty of opinion and its expression is the condition of all future progress. We were much pleased when assisting, for the first time, at a trial to find that, not as in Europe where the judges, curiously garbed, submit the prisoner equally with the prosecution to a sort of moral torture, we saw the prisoner sitting near his counsel, and the latter on an equality with the district attorney, addressed the jury and the court with full liberty! Certainly the direct and cross-examination of witnesses is liable to some amelioration, but this defect would soon be removed if physicians would follow the advice of Dr. J. Elwell, a medical gentleman, member of the bar of Cleveland, Ohio, in his excellent book on *Medical Evidence and Malpractice*. For our part we believe it a duty for any citizen, adopted or not, to try to remove what he thinks an obstacle to the free play of the great regulator of modern society—JUSTICE. Therefore we desire a great change should take place in legal procedure. For instance, that grand-juries should appoint a commission, composed at least of three physicians—experts, to report on the mental state of any alleged offender suspected of insanity; that report, signed by these commissioners, must necessarily become the field to which all discussions, opinions, direct and cross-examinations be confined or limited; the desultory *tohu-bohu* quotations and comparisons, with the so-called similar cases or decisions of judges who very seldom were just ones, would be abandoned. By this means only a jury and the court would be enabled to judge the facts and see the proper application of laws. Courts, on a sudden and unforeseen plea of insanity, should have the power to follow the same course.

In civil cases a jury, *de lunatico inquirendo*, is the most absurd method of arriving at the truth, unless a report on the mental state has been made previously by a commission of experts, which report may then be the base of a public discussion between the parties. It is evident to us that the direct and cross-examination of the experts bearing on their report, *describing the physical and moral symptoms* of the case, should be compared with the interrogation of the alleged lunatic, that the court, jury, and members of the bar may not be led astray by legal or metaphysical subtleties.

THERAPEUTICS OF ALBUMINURIA.

BEING REMARKS MADE BEFORE THE N. Y. ACADEMY OF MEDICINE, Nov. 5, 1862.

By JOSEPH M. SMITH, M.D.,

PROF. OF MATERIA MEDICA AND THERAPEUTICS, COLLEGE OF PHYSICIANS AND SURGEONS N. Y.

(*Concluded from page 55.*)

IN respect to the treatment of the chronic form of albuminuria, or, as we may now more properly say, Bright's disease, or uræmia, in which general dropsy is the most common and remarkable symptom; I say symptom, for it is nothing more, the first part of the threefold indication, I have mentioned to be considered, is that which points to the removal of the disease of the kidneys, or, in other words, to restore these organs to the condition in which they may be able to resume their proper function, viz. to eliminate the urea and other effete matter from the blood. It is in attempting to fulfil this indication that we discover the intractable nature of the disease.

I look upon Bright's disease, therefore, when it is insidiously developed, and not discovered to exist until the general health has been, for some time, seriously impaired, as in the great majority of cases incurable.

It is then only in the early stage of the disease that we may hope to arrest its progress, and afford permanent relief to the patient. But how to effect this is a question which I am not prepared to satisfactorily answer. There being in no period of the disease any very marked evidence of nephritic congestion or inflammation, the more active depletory measures are not, or but rarely, called for, and yet that a hyperæmial condition of the kidneys does probably exist in most cases, in the first stage of the disease, may be reasonably assumed; and, accordingly, antiphlogistic and revulsive remedies, as cupping of the loins, purgation, poultices to the back, and sudorifics, are clearly indicated, these last remedies being among the most efficient at our command. The earlier these therapeutical measures can be brought into use the greater will be the chances of recovery.

But in contemplating the disease of the kidneys as a single object of treatment, we take but a partial view of the morbid conditions which exist at the same time and which endanger life. Were the system to suffer only from the nervous irritation transmitted to it from chronic disease of the kidneys, apart from uræmia, life might be greatly protracted, as it frequently is in cases of various chronic local affections, by appropriate medical and regiminal treatment; but in Bright's disease, when the renal disorganization has made considerable progress, it not only disturbs sympathetically the whole economy, but interposes an impediment to the elimination of the effete nitrogenous principles in the blood, and thus adventitiously adds to the disease an element formidable and dangerous.

Now, as there is no way known to us of neutralizing the urea in the blood, we are led to consider the means suited to fulfil the second leading indication in the treatment, viz. to eliminate the urea from the circulating fluid. In endeavoring to accomplish this object, we are not to lose sight of the remedies, which tend to remove the congestion of the kidneys, but to continue them, if they be still indicated; and, while doing so, to administer such means as will increase the quantity of urine, or in other words, favor the elimination of urea, and, at the same time, effect another object of great moment, namely, the removal of the dropsy. We know of no other way of depurating the blood of urea than through the kidneys, the other emunctories affording no adequate vicarious outlet to that substance. As to the quantity of urea exhaled with the serum, so frequently infiltrated into the areolar tissue and occasionally collected in the closed cavities, it is probably too small to have any decided effect in relieving the system from its intoxicating influence.

As is well known, diuretics and alteratives are specially indicated in general dropsies. Among these calomel or blue pill, combined with squill and digitalis, has long been employed, especially in cases of cardiac dropsy. But in renal dropsy calomel and blue pill are liable to salivate, owing to there being in this disease a morbid susceptibility to their specific effects on the mouth. But while such is the fact in regard to these mercurials, it is not so in respect to the bichloride of mercury. This energetic preparation has been used with great success in the treatment of the dropsy connected with Bright's disease. Its employment in this disorder was, I believe, first suggested by myself, in the wards of the New York Hospital; and the earliest trials of it were made in that institution about twenty years ago, under the careful observation of the late Dr. Wotherspoon, then the resident physician of the house, and afterwards a surgeon in the United States army. It is, as I have just hinted, much less likely to produce salivation than the other common mercurials. Its alterative power is exerted upon every tissue and fibre of the body, and its therapeutical influence being diffused through the system, it resolves certain morbid conditions, local and constitutional, with great promptness. Besides acting favorably towards removing the lesion of the kidneys, it generally induces a copious diuresis; and, in this way, rapidly diminishes hydropic swellings. Two cases of renal dropsy, treated by it with favorable results, are recorded by Dr. Swett in his valuable paper on renal diseases in the *New York Journal of Medicine, for July*, 1844. In the first case calomel gr. ss. and squill grs. ij, were given three times a day, but it produced tenderness of the gums, and was discontinued, having afforded no relief. About ten days afterwards the bichloride of mercury was administered in doses of one-eighth of a grain with a drachm of tincture of cinchona, three times a day. This remedy acted decidedly as a diuretic, and almost entirely removed the dropsical effusion. Its use was continued for a considerable time without affecting the gums. The patient was discharged free from the dropsical symptoms and much improved in appearance; but the urine continued unchanged; it retained its smoky appearance and low specific gravity, and freely deposited albumen. In the second case, Dr. Swett prescribed the bichloride of mercury in the same manner, but with less benefit than in the first case, though it acted favorably in reducing the œdema of the legs and improving the countenance and complexion. The urine, however, afforded a large deposit of albumen. The result of the treatment is not stated, the record of the case being incomplete, the last report being the continuance of the corrosive sublimate and the tincture of cinchona.

Dr. Griscom has recorded, in the *New York Journal of Medicine, for November*, 1847, two cases of albuminuria with dropsy, in which the corrosive sublimate was exhibited. He tells us that "the treatment in these successful cases consisted in the administration of hydragogues for the direct removal of the fluid, and of bichloride of mercury for the original disease. The latter was given in doses from one-sixteenth to one-fourth grain, ter in die, in solution in tincture of bark one drachm. Under a steady exhibition of this, the albuminous deposit of the urine disappeared entirely in one case, and was considerably diminished in the other." In respect to the value of the corrosive sublimate as a remedy in renal dropsy, my own observations in hospital and private practice entirely accord with the favorable reports of its use I have cited.

Next to corrosive sublimate, in point of value as an alterative, ranks, perhaps, the iodide of potassium. This salt has been used with marked success in some cases, but it is more active as a diuretic in renal dropsy, than as an alterative. But so far as I have had opportunities to observe its action, it seems to have no solid claim to distinction as a remedy or palliative in this disease.

In regard to some diuretics they are objectionable on account of their over stimulating the kidneys and thus tending to increase their hyperæmial condition. Among the diuretics which are believed to be most useful are the acetate of potassa with the infusion of buchu and the liquor ammoniæ acetatis. The apocynum cannabinum is an active diuretic, and but for its nauseating and depressing and cathartic effect would often be preferred to any agent of its class.

As to squill, digitalis, and juniper, there is a question as to their suitableness to the treatment of uræmia. The question is suggested by the interesting investigations of Dr. Hammond, the present Surgeon-General of the United States army, into the action of these well known diuretics. This gentleman thinks that it is deducible from his experiments "that neither digitalis, juniper, nor squill, increases the total amount of solid matter eliminated by the kidneys, and that the organic matter is considerably reduced through their influence. Although they do increase the amount of inorganic matter removed through the urine, yet as it is the organic matter which is generally considered as contaminating the blood in disease, it is evident they exert no effect whatever in depurating this fluid, but, on the contrary, are positively injurious." Now, if this be so, seeing that urea is organic matter and accumulated in the blood in Bright's disease, are not digitalis, squill, and juniper improper diuretics in that disorder?

It is curious to notice, in connexion with these statements of Dr. Hammond, the opinion of Dr. Blackall in regard to the use of squill in renal dropsy. He says he has "sometimes seen it render service where the urine is partially coagulable. But in proportion as that symptom becomes more marked by its extreme constitutional characters, inflammations and a weakness of the digestive organs, it fails in its effect, or is even injurious. I have seldom had so much reason to regret the use of medicine as of squill in these circumstances."

As respects digitalis, if its action, like that alleged of squill, is to reduce the elimination of *organic* matter from the blood, though it increases the *inorganic*, it must be, at least in the advanced, if not in the earlier stages of uræmia, a dangerous diuretic, seeing that besides causing an accumulation of urea in the blood, it adds to this fluid its own peculiar proximate principle, *digitalia*, one of the most poisonous arterial sedatives. These two poisons, mingled and accumulated in the blood, and having no neutralizing action on each other, produce what may be called a double toxæmia, and thus not only aggravate the disease, but cause great exhaustion and sometimes sudden death.

If this view of the action of digitalis be correct, it seems proper to regard this agent as a simple hydragogue diuretic, and to confine its use to cases of dropsy in which there is no uræmia, as in cardiac dropsy, in which, combined with squill and calomel or blue pill, it has long been distinguished as a most effective means of removing serous effusion. Moreover, its use in dropsy depending on organic lesion of the heart should not generally be prescribed, until we are assured that the disease is not seriously complicated with uræmia.

These remarks concerning the action of digitalis naturally lead to the inquiry whether there are other poisonous vegetable principles, which, if used too freely in renal dropsy, may be injurious? Is it so with the organic alkalies of opium? There are occasional conditions in Bright's disease in which opium is indicated, and in which it may be advantageously administered. Its diaphoretic action, promoted by combining it with ipecac, as in Dover's powder, may in some cases give it a preference over other narcotics. But as opium manifestly diminishes the secretion of urine, and consequently causes an accumulation of urea in the blood, and as it has probably no power to neutralize urea, such as it has to neutralize atropia and other mydriatics, there is danger of its poisonous influence interfering with the elimination of urea, and, in this way, of destroying life. Such an incident happened in a case in which I had an opportunity of observing the phenomena a short time before death, and of noting the post-mortem appearances. Of similar cases there are authentic accounts.

There is another class of remedies which we must refer to, viz. purgatives. It is well known that the hydragogue cathartics are used with great benefit in general dropsy. They are advantageous in causing the absorption and discharge of the serum accumulated in the areolar tissue, and in the various closed cavities of the body. In this particular they are perhaps to be preferred in many cases to diuretics. Are they not, also, to some extent, useful as eliminatives of urea from the blood? Of this class of remedies the pulvis purgans, elaterium, senna, and the salines are the most favorable in their action. Care should be taken that they do not induce excessive irritation of the intestines.

In regard to diaphoretics, Prof. Clark has so well treated the subject that I may be excused from going over the ground a second time. I may merely mention, in passing, a remedy in which I have great confidence, and which has always, in my hands, been attended with pretty uniform results. I refer to a combination of the liquor ammoniæ acetatis and ipecacuanha. The former of these acts both upon the skin and kidneys, and tends to reduce the accumulation of fluid very rapidly. It is used advantageously with the great diaphoretic, so favorably noticed by Prof. Clark, viz. the hot-air or vapor bath. Most physicians are acquainted with the mode of applying this remedy. In the great majority of cases in which it is used, it proves serviceable. Its efficacy, however, is limited to the cases in which the cutaneous transpiration is readily increased. If, after a few trials, it fails to act as a sudorific, its continued use may be injurious. There is a collection of twenty-five cases of renal dropsy, published by Dr. Oscar G. Smith, in the *New York Journal of Medicine, for January*, 1857, which occurred during the three years, ending November 1, 1856, in the New York hospital, and which were mostly treated by the hot vapor bath, and the spiritus mindereri and ipecac, under the direction of Drs. Metcalfe, Griscom, Swett, Bulkley, T. F. Cock, and myself. Of these twenty-five cases, it is said seven recovered, twelve were relieved, one improved, and five died. Though so many are reported as leaving recovered or been entirely relieved, it is not probable that all of them were, strictly speaking, *cured*. It is rare to see a case of chronic Bright's disease so perfectly recovered as to show no evidence of its existence in the renal secretion.

We now come to consider the third indication of treatment in the chronic form of albuminuria, viz. to prevent or remove complications. Besides the dropsical effusions, which so constantly attend the disease, there are various other affections of a general or local character, which occasionally occur, and which increase the gravity and fatal tendency of the malady. The more common of these complications are convulsions, coma, amaurosis, or fatty degeneration of the retina, vomiting and inflammations of the brain, pericardium, endocardium, pleura, and peritoneum. To prevent these occurrences, nothing more can be done than to carefully avoid their exciting causes. Warm clothing and warm apartments will be found conducive to the comfort and safety of the patient; and if he be anæmic and feeble, the tincture of the sesquichloride of iron or some other ferruginous preparation will be an appropriate prescription. As to the remedies to be employed, in the event of any of the complications occurring, to which I have referred, I need not ennumerate them. They are sufficiently well understood by every general practitioner. It must be observed, however, that in using them, caution is necessary on account of the peculiar condition of the patient.

Now, in respect to one other point, and I will close. It is said by my distinguished colleague, Prof. Dalton, in his Treatise on Human Physiology, that "the quantity of urea varies with the nature of the food. Lehmann, by experiments on his own person, found that the quantity was larger while living exclusively on *animal* food, than with a mixed or vegetable diet; and that it generally was smallest when confined to a diet of purely non-nitrogenous substances, as starch, sugar, and oil." The daily quantity of urea in the urine when animal food was exclusively taken was 798 grains; when non-nitrogenous food was taken, such as those just mentioned, the quantity was only 231 grains, a difference of 567 grains. This is a very remarkable fact; and, if it be true, as Dumas asserts, respecting the origin of urea in the animal economy, that this substance proceeds from the albuminoid substances destroyed in the blood by an oxidating process, would not great advantage result to albuminurial patients, at least such of them as are plethoric and eat much animal food, if they would avoid such diet, and thus diminish the amount of urea generated in the blood? These considerations appear to me to deserve the special attention of gentlemen who have the direction of the regimen of women during the period of utero-gestation, and particularly of those primiparæ whose conformation of body and general hyperæmia predispose them to eclampsia.

NITROUS OXIDE.

ITS MEDICINAL PROPERTIES AND APPLICATIONS.

By GEO. J. ZIEGLER, M.D.,

OF PHILADELPHIA.

Two late numbers of the Medical Times contain an interesting article on the use of nitrous oxide in certain fevers, which the author, Dr. Shumard, seems to think is new and peculiar to himself. But such is not the case, for the observations which he records in favor of the curative efficiency of the protoxide of nitrogen in the febrile conditions mentioned, are only confirmatory of the many facts and suggestions upon the subject of the unique properties and valuable therapeutical applications of nitrous oxide long since and repeatedly presented by myself in the several publications named below. I have therein shown that the protoxide of nitrogen possesses powerful hæmatic, neurotic, exhilarant, and other characteristic properties, and that it is applicable to the treatment of numerous and diversified disorders of the animal economy. Also that it is especially indicated notoriously in typhus, but likewise in intermittent, congestive, yellow, and all other fevers of a similar character, as well as in adynamic states generally. Furthermore, that it is useful in certain other toxical conditions of the system from various poisonous substances which may either be generated within or be introduced from without the body. Moreover, that the peculiar constitution, characteristic properties, and extensive range of therapeutic application renders the nitrous oxide one of the most remarkable and valuable remedial agents known. In brief, as I have elsewhere stated, my own observations, experiments, and experience have taught me that the protoxide of nitrogen, or so called "laughing gas," is a direct, potent, and permanent chemico-organic, arterial, nervous, cerebral, and general stimulant, diuretic, aphrodisiac, and antitoxic; and is thus a superior hæmatic, neurotic, tonic, secernent, resolvent, alterative, antidote, antiseptic, etc., etc.

The nitrous oxide may be administered either in its gaseous state immediately by the lungs, or be combined with some liquid, and thus introduced through the alimentary canal. For obvious reasons water is the most eligible vehicle for the purpose, and when surcharged with protoxide of nitrogen forms a very convenient and not unpleasant preparation. The addition of aromatic and other agreeable compatible substances makes this compound a very palatable beverage. The nitrous oxide water may be used in doses of from f℥j. to Oss. or more, and as frequently as necessary, according to the exigencies of the case requiring treatment, and be exhibited either by the mouth or rectum.*

But as I did not intend to enlarge upon this subject at present, though expecting to do so soon, I will in conclusion refer those interested to the more specific details of the medicinal properties and applications of nitrous oxide in my former publications. These are respectively entitled:—Zoo-adynamia; Toxicological (but which should have been Antidotal) Applications of Nitrous Oxide, *Boston Med. and Surg. Journ.*, Vol. xlvi. No. 14; Anæmatosis—its Consequences, Prevention, and Treatment, Ibid., Vol. xlvi. Nos. 22 and 23; Experimental Investigation on the Antidotal and Revivifying Properties of Nitrous Oxide, Ibid., xlvii. No. 19; Hæmatosis—its Natural and Artificial Induction, Ibid., Vol. xlix. Nos. 3, 4, 5, and 6; Glucosis, Ibid., Vol. l. No. 11; Nitrous Oxide—its Properties and Applications, *Dental Cosmos*, Vol. i. No. 2.

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* The nitrous oxide water (Aq. Nitrog. Protox.) is prepared and sold by T. A. Lancaster, pharmaceutist, Arch and Tenth streets, Philadelphia.

I hope these brief remarks will help to concentrate attention upon a remedial agent of extraordinary power, and promote the cause of science.

Philadelphia, January 19, 1863.

Reports of Hospitals.

U. S. GENERAL HOSPITAL, LEXINGTON AVENUE, N. Y.

CASES OF GUNSHOT WOUND.

By A. E. M. PURDY, M.D.,

ACTING ASSISTANT SURGEON U.S.A.

Case I.—*Gunshot Wound of Arm.—Erysipelas.—Amputation.*—Alvah Cotton, private Co. F, 22d Regiment Mass. Vols. Wounded in the action at Gaines' Hill, June 27, 1862. The regiment being outflanked, they were forced to retreat; and it was during this retreat he received his wounds. The first ball entered the left nates, obliquely emerging through the perineum, and passing directly through the scrotum, destroying the right testicle and cutting off a piece from the right side of the glans penis. The second ball entered about half an inch above the styloid process of the ulna, passed through the fascia and tendons, and emerged at the metacarpo-phalangeal articulation of the thumb. After receiving these wounds he walked about twenty rods to a log shanty.

In a short time a rebel soldier came along and threatened to bayonet him, but upon his expostulating he was ordered to the rear as prisoner. He then walked about one-third of a mile to a creek, where he asked the rebel to let him drink. In striving to get some water, being fatigued from his exertions and exhausted by the hæmorrhage from these wounds, he fell into the water, where he remained about two hours. By this time the fighting was over, and the rebels having all they could do to look after their own wounded, upon his solicitation taking him out of the water, they placed him upon the bank, leaving him covered with his blanket. He slept there all night, and in the morning the rebels came back and removed him to a hospital at Gaines' Hill, where he remained about a month, when he was sent to Richmond, and from thence was sent north on parole. While in hospital at Gaines' Hill the arm was attacked with erysipelas, which so increased that upon his arrival at Fortress Monroe it was deemed necessary to lay open the limb, on its internal aspect, from the carpal joint to within an inch of the axilla. The wounds were dressed throughout with cold water, except during the attack of erysipelas, when poultices of flaxseed were used. Upon arriving at this hospital, August 1, 1862, the wound of the scrotum had almost healed, and, in fact, had given very little trouble. The arm was slightly swollen, with a little appearance of erysipelas; the wound in the arm was discharging large quantities of quite healthy pus, but was not healing. The arm began gradually to swell, and the discharge increased. His vitality, already low, became weaker daily, until it was deemed best to amputate, which operation was performed on the 16th of August, 1862, by Dr. Alexander B. Mott, surgeon in charge, assisted by Dr. John J. Crane. The circular method was chosen, and upon the incision being made the parts were found extensively infiltrated with serum. The patient rallied well after the operation; water dressings were applied, and dry lint used for the first month, at the end of which time the patient was able to walk about the ward.

II.—*Gunshot Wound of Knee.—Amputation of Thigh.*—Charles Mensh, private, Co. H, 33d Regt. N. Y. Vols. Wounded in the action at Williamsburgh, Va., May 5, 1862. The ball entered about four inches above the patella, passed completely through the joint, and emerged at the external side of the tibia, three inches below the lower border of the patella. The wound was received during a bayonet charge, the knee being flexed. He fired his piece several times after receiving the wound, but finally fell and was carried to the rear, where water dressings were applied. Upon his admission to this hospital, May 14, 1862, the tissues of the joint were wholly destroyed, the wound discharging a thin sanious fluid, and the probe could be passed through the traject of the ball. A consultation being held, amputation was deemed advisable; but the patient being averse to losing the limb, it was not thought dangerous to temporize. His strength, however, continued to fail, with intense pain, which was continuous, and any longer delay was deemed dangerous. Accordingly, on the 31st of May, the leg was amputated at the middle third of the thigh, by Dr. Alexander B. Mott, the double flap operation being chosen. The patient bore the shock remarkably well, and rallied rapidly. The flaps were brought together by interrupted sutures, and everything went well. On the second day the flaps seemed to have united by first intention, but on the afternoon of the seventh day the edges of the wound presented a thickened livid appearance, the capillary circulation was very feeble, and the adhesions and granulations could be easily broken up. The discharge was thin and fœtid. The patient at this time was pale, with extremities cold, and a slightly accelerated pulse. Stimulants and nourishment were freely given, but with no success, as the patient sank, dying in ten hours after the first appearance of the disorder, which proved to be gangrene.

III.—*Gunshot Wound of Wrist.—Amputation of Forearm.*—Almond Davis, private, Co. E, 32d Regt. N. Y. Vols. Wounded at the battle of Williamsburgh, Va., May 5, 1862, by a Minié ball, which passed through the carpus, shattering it completely. Upon his arrival at this hospital, May 26, 1862, the wound showed no signs of healing, but was œdematous. A considerable erysipelatous inflammation set in. A slight incision revealed the shattered condition of the bones and the total destruction of the tissues, when it was thought best to amputate. This the patient readily assented to, as he had been anxious for it some time previous. The operation was performed at the lower third of the forearm, on the 31st of May, the method chosen being the ordinary circular one, by Dr. Alexander B. Mott. The patient rallied well. The edges of the wound were brought together with sutures. The day following the operation the patient was seized with rigors, followed by violent febrile symptoms; at the same time there was slight delirium at intervals. The stump looked angry, and the discharge became thin and scanty, and it was thought best to open the wound. His stomach now became irritable, being scarcely able to retain his food. At the same time a slight diarrhœa commenced, which greatly prostrated him. The chills continued, but more frequent, and the delirium became now constant. The vomiting became worse hourly, and nothing was retained for a moment. His vitality, already low, now gradually failed, the delirium and diarrhœa continuing until his death, which took place on the seventh day after amputation.

IV.—*Gunshot Wound of Face.*—Harlen P. West, private, Co. I, 38th Regt. N. Y. Vols. Wounded in the action at Williamsburgh, Va., May 5, 1862. The ball entered the left side of the face, internally to the zygoma, and fracturing it, separating the malar bone from its articulations, fracturing the squamous portion of the temporal bone, also the ramus and symphysis of the inferior maxilla, emerged anteriorly to the right of the larynx. For twenty-four hours after receiving the wound there was extensive hæmorrhage, which ceased spontaneously. Upon his arrival at this hospital, May 25th, his face was greatly swollen, and deglutition was almost impossible. He continued to suffer until the 31st of May, when he died rather suddenly, and an autopsy revealed the above facts.

V.—*Gunshot Wound of Left Groin.—Neuralgia.—Removal of ball.*—Daniel Glacken, private, Co. I, 73d Regt. N. Y. Vols. Wounded at the battle of Williamsburgh, Va., May 5, 1862. The ball entered the left inguinal region, half an inch above Poupart's ligament on the external side, and barely escaped the femoral artery and vein. At the time of receiving the wound he was erect in the act of making a charge upon the enemy; he instantly fell and remained upon the field of battle five hours, when he was taken to the field hospital, where his wound was dressed with cold water. The hæmorrhage was slight, and the ball remained in the wound. He was transported to Fortress Monroe, where he remained only a short time, coming to New York, via Baltimore, where he tarried two days. Upon his arrival, May 14, 1862, the wound was about an inch in length, the femoral artery pulsating on the inner edge; it was discharging freely and very painful, and the patient was unable to move. He continued to suffer such intense pain that it became necessary to give him 60 gtt. Magendie's solution of sulph. morphine daily. An attempt was made to probe for the ball, but without success. This state continued until the 5th of June, when it was determined to enlarge the wound on the external side and search for the ball. The patient was accordingly etherized, and the opening enlarged about an inch. Dr. Alex. B. Mott introduced his finger carefully, and after considerable manipulation the ball could be detected downwards and backwards between the gluteal muscles, and the sac of the peritoneum could be distinctly felt above the finger. A pair of curved polypus forceps were introduced, and the ball extracted. It proved to be a round musket ball. After its extraction the pain diminished and more perfect rest was obtained, until June 15, 1862, when a swelling was noticed on the thigh, and a large abscess formed extending from the gluteal region to the knee, beneath the fascia lata. Upon being opened it discharged a large quantity of fœtid pus, which discharge continued so profuse for about forty days that it became necessary to give syr. ferri iodid. and stimulants, to keep up the patient's strength. August 1st.—The patient seemed to improve slightly, the pain became less severe, the discharge less and more healthy, and the swelling on the hip considerably diminished. The improvement continued until August 15th, when he was able to walk about the ward on crutches, and by the 1st of September could walk with very slight assistance from a cane.

Reports of Societies.

NEW YORK COUNTY MEDICAL SOCIETY.

Stated Meeting, Jan. 5, 1863.

ALFRED UNDERHILL, M.D., PRESIDENT, IN THE CHAIR.

[Reported by Guido Furman, M.D., Secretary.]

DISCUSSION ON DIPHTHERIA.

Dr. **Conant** first referred to the writings of Bretonneau, who first described the disease, and who considered it to be a pseudo-membranous stomatitis, purely local, and destroying life by its effects on the larynx His treatment was directed almost entirely to the respiratory passages.

The speaker next referred to the views of Lacock and others, who regard this malady as due to the presence of a parasitic fungus, the *oidium albicans*, whose irritation upon the mucous membrane excites exudation of plasma, though it produces neither vesicles nor ulceration, like the aphthous mouth; it has a deeper red congested base, and is undoubtedly contagious in character, inasmuch as, if by accident or otherwise the parasite be brought in contact with the mucous membrane of the attending physician or nurse, the disease is readily propagated. The treatment of those who entertained these views was principally of a local nature; Antiseptics to destroy the fungus: gargles of borax, chlorate of potash, corrosive sublimate, the sulphates of iron, zinc, and copper, together with general tonics and stimulants.

Reference was then made to a letter written by Dr. Ash, of Birmingham, England, dated Nov. 30, 1778, in which he describes a disease, then prevailing extensively in that vicinity, with all the characteristic symptoms of diphtheria.

The physicians of the present day are almost universal in the belief that this is a zymotic disease, and that the older physicians were mistaken in their views of its nature, and, consequently, were led into error in regard to the treatment.

Dr. C. described this malady under three types, as follows: First, the mild or pharyngeal; where the constitutional disturbances are mild, and where the pseudo-membranous formation is confined exclusively to the upper part of the pharynx.

Second, The type, which he called the croupal or laryngeal, was that in which the exudation extended down into the rima glottidis; the offensive breath, accompanied by the characteristic discharge from the nose, was present, and all the constitutional symptoms were more intense. This form is very likely to be mistaken for croup, and it is of the utmost importance that the diagnosis should be correct, as the treatment is almost diametrically opposite.

The Third, he called the malignant type, in which we have all the symptoms aggravated, the disease extending to the bronchial tubes, and the general system prostrated from the onset of the malady. The pulse is rapid, but without volume; and the muscles seem to lose entirely their tonicity. Patients suffering from this form may die in from twelve to thirty-six hours, and treatment can be of little avail; but in the former types the following treatment was recommended.

The local treatment consisted of muriated tinct. iron, muriatic acid, and muriate of ammonia, applied with a soft brush, in such strength as will be found acceptable to the patient; ignoring hard sponging or anything tending to increase the irritation. Tracheotomy could hardly be taken into consideration, as in all those cases where the larynx is involved so as to require the operation, the malady has extended far down into the trachea. The excretions should be carefully watched. In the early stage of the disease it is well to administer a few mild doses of some alterative cathartic.

Thirdly: The sustaining treatment. This being by far the most important, comprising the ferruginous tonics, especially the muriated tincture of iron with quinine, beef tea, milk punch, egg nogg, wine whey, and so forth, used per rectum if the patient is unable to swallow, were highly recommended. The sick room should be well ventilated, the atmosphere be kept dry, and the temperature from 65 to 70 degrees Fahrenheit.

Dr. C. believes that much can be done to prevent or modify the severity of this disease, when persons are rendered liable to contract the same, by the use of small doses of aconite and belladonna, the former for its diaphoretic properties, and the belladonna to deaden the irritability of the nervous system; and by the use of the muriatic tincture of iron.

This disorder occurs much more frequently in the young than the adult, a very large proportion of deaths occurring in children from one to five years of age; male and female being equally liable. Wealth and affluence are no barrier, as children surrounded by every comfort which these can bestow are not exempt from its invasion. Reference was made to reports of cases occurring in country farmhouses, when children occupying tenement houses in the factory villages near by remained entirely exempt; and Dr. C. believes that the disease is more malignant and fatal in country towns than in large cities in proportion to the number attacked.

The duration of diphtheria is from six to eight days; but in many cases convalescence is much prolonged, and in these there is very frequently paralysis in one or more nerves as a sequela, which Dr. C. believes conclusively proves this to be a blood disease, though he is aware that we may have reflex paralysis from irritation to any given nerve. Dr. C. cited four cases that came under his own observation, where paralysis of the optic nerves occurred with almost total blindness, but which recovered perfectly under the use of iron and quinine in about three months from the attack. He also referred to cases of paralysis of the phrenic, glosso-pharyngeal, and spinal accessory nerves, following cases where severe adenitis had been present in the deep cervical glands. The cases are reported to have died.

An opportunity of making a post-mortem examination of the dead body, when diphtheria was the cause of death, had never presented itself to the speaker, but as far as he can learn from reported post-mortems, nothing of particular interest had been found.

He then referred to some twenty-four cases, for whose treatment he had been more or less responsible, only one of whom had died: also to the report of Mons. Loiseau, of ninety-five cases, treated topically, with only two deaths; to the report of Dr. Creighton, of Edinburgh, of forty-five cases, of whom seven died; of 564 cases, reported by Dr. Ellis, of Crowell, Lincolnshire, in which 78 cases proved fatal; again, to the report of Surgeon-General Vanderpoel of this State, where diphtheria was manifest in 144 recruits, of whom only one died; all were treated with the muriated tincture of iron and muriatic acid in water, strong enough to make a pleasant drink. Lastly, Dr. C. referred to the report of Dr. I. H. Guilt, of Rupert, Vermont; this gentleman reports sixty-five cases, and only one death, thus showing that the mortality is less than generally supposed. In conclusion Dr. C. stated his belief that the investigation of the sequelæ would lead to the discovery of the true pathology of this disorder.

Dr. Peaslee entertained similar views of diphtheria; remarking that the pathology of the disease in question was not yet fully established, though it of course was the basis of all rational treatment.

Dr. P. maintained that zymotic diseases alone were followed by true sequelæ. Besides, the same exudation is sometimes to be found in cases of diphtheria, on other parts of the mucous membrane, as in the vagina and conjunctiva; the appearance of it on a vesicated surface, he did not, however, consider distinctive. It not being a local disease, he thinks that comparatively slight attention should be paid to the local symptoms. The nitrate of silver, chlorate of potash, muriated tincture of iron and iodine were advocated by the speaker as local applications when the exudation required them. The great remedy, however, is, as in all zymotic diseases, "quinine." Muriated tincture of iron is good, but does not, generally, agree as well with the stomach as the quinine. In general he would say quinine, pure air, and the most nourishing diet, with stimulants if required, would constitute the treatment of this disease. When prostration and typhoid symptoms occur, treat it as you would typhoid fever. Considers dissolving agents of the diphtheritic exudation as useless, except when it is so abundant as to interfere with respiration.

Dr. Stone stated that his views coincided with the observations made by Drs. Conant and Peaslee, and extolled the use of tonics, stimulants, and nourishment. He advocated good food and wine, fresh air, and plenty of it, as the principal remedies. Related a case in which he recently adopted the out-of-door treatment, which was successful; still he would not subject a patient to a north-east wind. Dr. S., believing it to be a blood disease, considers the local treatment of but little importance. Considers it to be contagious, and related a circumstance where this disease cleared out a whole school, the teacher and his family included. Vomiting, he looks upon as a fatal symptom. He related the case of a lady, who was in perfect health on a Friday evening, and died the following Tuesday afternoon of diphtheria. During the last day of her life her catamenia, which were regular, appeared, and with it the vomiting, which always accompanied this function in her; at the time this occurred she was convalescing, and it is Dr. Stone's opinion that her death was due exclusively to the vomiting.

Dr. Bulkley regards it as a blood disease, and considers the local treatment as comparatively of little consequence. Is in the habit of using internally a combination of chlorate of potash and muriated tincture of iron, nourishing diet, such as beef-tea, etc., also stimulants according to the severity of the case. Dr. B. has recognised the diphtheritic exudation on the lips.

Dr. B. read a notice which he had met with in a London Journal of the occurrence of a case of diphtheria at sea, in an officer in the merchant service, who was attacked by it sixty miles off the Cape of Good Hope, on a return voyage from Australia, being then two months out from Melbourne. The disease was very severe, and was succeeded by loss of voice and general paralysis of the limbs, which lasted to a greater or less degree during the remainder of the voyage (two months) and for nearly three months afterwards. He was fast recovering when the letter was written. It was the only case that occurred on board the ship. The weather was exceedingly hot, but the ship was not particularly foul; there was no unusual amount of illness on board during the voyage. The patient was not called below by duty more than others, and he was not aware that diphtheria was prevalent at Melbourne during his stay there.

Dr. Downs gave the history, treatment, and results of several cases occurring in his practice.

The Society then adjourned.

FOREIGN CORRESPONDENCE.

LETTER XXIV.

By PROF. CHARLES A. LEE.

MINERAL WATERS.

Wiesbaden, Sept., 1862.

Perhaps no part of the world contains, within so small a compass, so many valuable mineral waters as this duchy of Nassau. Nor would it be easy to find a greater variety of beautiful scenery. Its thermal springs are described by Pliny in his Natural History, and there is no reason to doubt but they have been known and highly prized from a very remote antiquity. This, certainly, is a highly favored country in many respects. Its soil is fertile; its climate is admirable; its inhabitants intelligent, temperate, honest, and industrious; education, being compulsory, is universal; begging prohibited; taxes light; peace and plenty everywhere abound. This small duchy would seem to embrace an epitome of all the medicinal springs of the world; at Weilbach, *e. g.* we have the sulphur; at Sollen, the cold saline; at Kronthal, the acidulous and chalybeate; at Baden and Wiesbaden, the hot saline; at Homborg, the cold saline and chalybeate; at Swalbach, the chalybeate; at Ems, the hot alkaline; the same at Sohlangenbad, etc., etc.

Wiesbaden is the capital of the duchy, and only about two miles from the Rhine. For beauty of scenery, elegant buildings, fine roads and walks, splendid hotels and lodging-houses, and magnificent cursaal, it is not surpassed by any watering-place on the continent. Gaming is here under the superintendence of the government, as at Homborg and Baden, but it is said that the stakes are not usually as high as at the latter places. I, however, saw no difference in this respect. The duke is very wise in prohibiting his own subjects from playing, although he is willing to participate in the profits derived from gullible foreigners.

Although there are several springs here, there is only one deserving particular mention, viz. the Kochbrunn. Here a handsome colonnade has been erected, and crowds assemble every morning to drink the water. Immense quantities of carbonic acid gas are given off, as at Baden, which causes a constant ebullition of the waters. On one side of the place is a hospital for poor patients requiring the use of the waters, as at all the watering-places of Germany. A constant stream of vapor ascends from the spring. All the neighboring bath-houses and hotels are supplied from this source. Some of the hotels, however, are supplied from the other springs, which are situated nearer. The temperature of the Kochbrunnen is about 158° F. The water is limpid and nearly odorless. The chloride of sodium constitutes seven-eighths of its entire mineral constituents, the chlorides of magnesium and of lime existing in very small quantity, and a trace of the bromide of potassium. Walchner has recently detected in it a minute quantity of arsenic, and there is reason to believe it exists in most mineral waters. Wiesbaden is more frequented by real invalids than Baden, and chiefly for the purpose of bathing; a considerable proportion, however, drink the waters at the same time. Considering the elevated temperature of the water, and its gaseous contents, its baths must necessarily prove very stimulating, and instances are not wanting where they have proved injurious, owing to this circumstance; and hence it is quite common for physicians to advise a certain portion of pure water to be mixed with it. There are about fifty bathing establishments in the town, and nearly one thousand bath cabinets. The Kochbrunnen and Adler supply the greater number, but several, as already stated, have their special springs. The principal establishments have *douching* apparatus, not descending from a height in a large column as at some of our water-cures, although there are three such, where the water falls from fourteen to sixteen feet. These are not much used, but the lateral *douche* is in great repute. The water is pumped from outside the bath, and passes through a flexible tube introduced by a hole in the door, and an attendant directs it to the part required. They are only given in the bath, the whole body being exposed, while in some other places I have known an arm or leg passed through a screen with apertures, the patient, in the meantime, keeping his clothes on. The temperature of the different springs varies from 158° to 140°, the Schützenhof, which is the most remote. There is no doubt that all have a common source, and the water is cooled by passing some distance under ground before coming to the surface. In all cases the water is left for some hours in reservoirs or baths to cool before it is used, acid and in the meantime parts with much of its carbonic gas.

The different springs differ but very little in chemical composition. The only springs in Germany which resemble it are those of Borcette, near Aix-la-Chapelle. All European physicians, I believe, agree in opinion that the Wiesbaden springs are, in some diseases, the most valuable mineral waters known, especially in gout and rheumatism of a chronic character. Indeed some do go so far in their enthusiasm as to say that the more inveterate the gout the more certain it is to be cured or alleviated by the use of these waters. The water is used both internally and externally in such cases, and mild douching upon the stiff and swollen parts exerts a very happy influence, unless, perhaps, there be acute inflammation present. Some complain of unpleasant effects after using these waters for bathing and drinking a short time, such as headache, insomnia, giddiness, flushing, and throbbing of the temples, etc. These rapidly disappear on taking some laxative and suspending the use of the waters; but if they are disregarded, it is very common to find them followed by excessive transpiration, miliary eruptions, diarrhœa, and an ammoniacal sediment in the urine. Nearly all gouty patients who come here are told by the resident physicians that they must expect to be worse before they are better, and that their disease will probably be aggravated at first. In cases of repelled and irregular gout I am told that a course of these waters causes the morbid action to be restricted to one spot, but it is very common for gouty persons to have an attack brought on when first commencing the use of the waters. From what I have seen and heard I certainly should not advise any laboring under acute forms of rheumatism or gout to venture on their use; but if I had either in a chronic form I should place more confidence in them than any mineral waters I am acquainted with. Our distinguished fellow townsman, the Rev. Dr. Chapin, has been nearly if not quite cured of his rheumatism, or rheumatic gout, by the Wiesbaden waters during the present season. In ordinary cases two or three weeks will suffice for a cure; but where the disease has been of long standing a longer time will be required. I am inclined to think that sufficient attention is not paid by the physicians here to the heart-complications of rheumatism, and corresponding modifications in the treatment; auscultation and percussion being less practised than in our own country. I believe it is generally agreed that these waters prove prejudicial in organic diseases of the lungs, heart, and abdominal organs generally, except hæmorrhoidal affections, in which they have been often useful. They have a good deal of reputation in a certain kind of chronic palsies, in non-plethoric subjects, with no cerebral tendencies; also in scrofulous cases, and generally disordered health, without actual local disease. Patients who labor under the sequelæ of intermittent or remittent fevers, as splenic and other engorgements, dry skin, and deranged abdominal secretions, are usually benefited by a course of these waters. The same may be said of hypochondriasis, derangement of the menstrual function, syphilitic and mercurial affections, certain cutaneous affections, as psoriasis, impetigo, etc., bronchial and laryngeal affections not complicated with tuberculous disease, etc. Too much, however, is generally expected from these as well as other mineral waters, especially where disease has been of long standing. An amelioration may often be safely calculated upon where a cure is out of the question.

American Medical Times.

SATURDAY, FEBRUARY 7, 1863.

STATE COMMISSIONERS IN LUNACY.

We have already noticed the fact that his Excellency Gov. Seymour has renewed the recommendation to the Legislature to create in this State a commissioner in lunacy. For several successive years such a bill has been before the Legislature, but some pernicious and unaccountable influence has thus far prevented its enactment. It is probable that it has failed because, in the lobby phrase, "there is no money in it!" The friends of this most righteous measure should not be discouraged by repeated defeats, but should urge its passage by every legitimate means and argument.

Volumes might be written in advocacy of this measure, but we shall not find language more cogent, nor arguments more convincing, than in the report of the Select Committee of the Senate on *Charitable Institutions, Poor-Houses, etc.*, made in 1857. Who can contemplate the following facts, established by that Commission, without being made an earnest advocate of a law that will remedy the evil? They assert that in the Empire State 329 males and 508 females, lunatics (their number must now be much increased), are confined in poorhouses, destitute of medical care and attendance. Of these 837 destitute beings

130 were reported as being in *cells* and *chains!* In some cases the inmates sicken and die without any attendance whatever. The treatment of lunatics and idiots is frequently abusive. The cells and sheds in which they are confined are *wretched abodes*, often wholly *unprovided* with *bedding*. In most cases female lunatics had none but male attendants. Instances were testified to of *whipping* of male and female idiots and lunatics, and of confining the latter in loathsome cells and binding them with chains. In some poor-houses the committee found lunatics, both male and female, in cells, *in a state of nudity*. The cells were intolerably offensive, littered with the long accumulated filth of the occupants, and with straw reduced to chaff by long use as bedding, portions of which, mingled with the filth, adhered to the persons of the inmates, and formed the ONLY COVERING they had.

What sickening details of human sorrow and wretchedness may not these facts justly suggest to a benevolent mind! What scenes of insane violence, what anguish of spirit leading to despair, what midnight cursings and hideous noises, that would chill the blood of a fiend! Such shocking barbarities towards a class of innocent and helpless beings is as revolting as any of the revelations of the scenes in madhouses of the seventeenth century. And yet they exist in our very midst, and among the constituents of every member of the present legislature. They are not patent to public observation, but lurk in that gloomy abode of poverty, the alms-house, which the country people shun as they would a pest-house. Will such abominations last for ever?

The true remedy for this great evil is a properly constructed commission in lunacy, intrusted with ample power to examine into and improve the condition of the pauper insane. This commission should not be temporary, but permanent in its organization. Nor should it consist of a single commissioner. We have shown on other occasions how inadequate would be the labors of a single person, however well qualified to the service required. The commission should consist of at least three members of our profession, who, by their experience, special knowledge, and writings, are what may be properly termed EXPERTS IN LUNACY. They should not only have a general supervision of the insane of the State, whether in asylums or out, but they should be qualified to counsel and guide public authorities in their administration of all that concerns insane persons. Fortunately we have men thoroughly competent to perform such duties. COVENTRY, GRAY, BROWN, BRADFORD, RANNEY, PARIGOT, OGDEN, CHAPIN, CLEVELAND, HALL, COATES, are names of medical men of this State who are eminently qualified for these special services.

For several years the reports of European commissioners in lunacy, and also those of some of the United States, have been the best sources of information on insanity. They contain a condensed review of all the valuable documents presented by the superintendents of asylums. They are no longer limited, as formerly, to mere statistics, but they now contain, besides the statistical tables, all possible information on the most essential points. They discuss at length the best methods of moral and medical treatment, and the hygiene and special architecture of asylums. The recent agitation of the *Free-Air System* is a topic, for example, which commissioners have studied and discussed to great advantage. We refer now to free-air colonies, and not to the *economical scheme* of converting asylums into self-supporting farms, like that of Fitz-James, near Paris. There are also many subordinate questions, which such commissioners investigate, as, pauperism, drunkenness, the solitary confinement in imprisonment, emigration, the moral and physical education of idiots, etc., etc. As a model in these respects we might refer to the reports of the Massachusetts Commissioners. But still other services might be required from such commissioners; they should be called upon to prepare any proposed law on insanity which the government or legislature might wish to consider. This would require familiarity with the existing laws on insanity, and with those lately enacted in England, Germany, France, and other foreign countries.

The benefits which will follow the appointment of a commission may be briefly stated:—first, a complete reform in the treatment of lunatics and idiots; secondly, an effective diminution of insane persons by cure; and, thirdly, the alleviation of the sufferings of incurables, and the readmittance of all to their natural rights.

THE WEEK.

Two suicides and one homicide were reported on one day as occurring at the hands of persons who have been recognised as of unsound mind, but who have been allowed at large. The first was the case of JOHN FITZGERALD, a wealthy banker of Wisconsin, who came to this city for his health. One member of his family had died in a lunatic asylum, and he, fearing that he might become insane, had threatened his own life. He retired to his room at the St. Nicholas, and, after writing letters to his wife and friends giving instructions as to his burial, deliberately shot himself. The second case occurred at the Sailors' Snug Harbor, Staten Island. An inmate of that institution, named INGALLS, had been reproved for swearing by the Chaplain, the REV. MR. QUINN. At this the sailor seemed to become alarmed lest he should be exposed for what he called "that horrible affair." He importuned the Chaplain not to expose him, but the latter made light of his alarm, attributing it to a slight aberration of mind. On the morning of the murder INGALLS was noticed to act strangely. On leaving the institution after services on Sunday, the Chaplain met the sailor, who said, "You will expose me, I know you will, if you live," and drawing a double-barrelled pistol from his breast first shot the Chaplain dead, and then discharged it at his own head, inflicting a fatal wound.

We have frequently called attention to the importance of placing persons *suspected* of insanity under proper surveillance, and also under medical treatment. These shocking crimes, now of almost daily occurrence, show how many cases of unrecognised insanity exist in every community. We hope they will have the effect to awaken the public attention to the necessity of placing this class of persons under timely treatment.

RAILROAD accidents, now so common, and generally so fatal to human life, deserve far more attention than they receive. Both as a matter of humanity and economy every means should be taken for their prevention, and to mitigate their fatality and the attendant suffering. Through the praiseworthy efforts of DR. ARNOLD, of Yonkers, a bill was introduced into the N. Y. State Legislature last Winter, which provided surgical aid in these accidents, but unfortunately it failed to become a law. That measure, or one similar, should be enacted by every State Legislature. Meantime, we are pleased to notice that Mr. Tiemann, under the direction of Dr. E. G. Ludlow, of this city, has prepared a small compact case of instruments, and a set of splints, which are to be placed on each train, in charge of the conductor. The case contains two simple tourniquets, lint, ligatures, scalpel, scissors, lancet, tenaculum, aneurism needle, and such remedies as persulphate of iron, ammonia, brandy, etc. Dr. Ludlow's attention was first drawn to the need of such preparation to meet the emergencies of railroad accidents several years ago, by being called to see a man who, having a large artery ruptured by such an accident, was placed in the car with a rope twisted around the limb to prevent hæmorrhage. The cord, however, loosened, and the patient bled to death before medical aid could be summoned. The design of the present arrangement is to have the conductor instructed in applying the tourniquet, and in the use of the styptic, the stimulants, and the splints. If a medical man is on the train, which will generally be the case, the instruments are placed at his service. The case has been approved by some of the best surgeons of the city, and we are glad to learn that the New Haven and Harlem railroad companies have already adopted it.

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The Legislature of the State of New York has under consideration a Bill establishing a hospital and home for disabled soldiers enlisted from this State. The project is worthy of the most serious attention, not only of the Legislature, but of the people. It is desirable that the committees appointed to report on the subject should take the advice of medical men. The location of the building, its architectural arrangements, and everything relating to the hygiene and the medical appointment of the institution, require the advice of the most experienced physicians.

Correspondence.

TREATMENT OF TETANUS.

[To the Editor of the American Medical Times.]

Sir:—Of late, repeatedly, attention has been called to this terrible destroyer of life. I have seen several cases of it treated, as that of Dr. Peters, with cannabis indica, without material benefit. In one case treated by Professor Chapman, while I was Resident Surgeon of Long Island College Hospital, in which both that and chloroform were alternately used, I observed that some modification for the better of the spasmodic throes while on the patient, was occasionally caused by the latter, while the former was wholly ineffectual.

I have again and again decided, had I a case under my charge, to treat it with large doses frequently repeated of ipecac or podophyllin, or both combined. The peculiar effect we seek in the administration of tartar emetic, viz. the suspension of spasmodic action, is never so steadily and continuously obtained as by the podophyllin in grain doses. Besides, I would keep the patient's entire body in a state of fomentation by the hottest vapor bath which can be conveniently arranged, or by the hot bath, long continued, in which a slight infusion of tobacco had been placed. I have imagined, too, that the almost total suspension of the action and relations of the skin, *i.e.* the entire surface of the body, by coating it with some viscid, gummy, or oleaginous substance, to the complete exclusion of the air, for the time being, might be more or less effectual in interrupting spasmodic action. A continuous garment of thin caoutchouc, fitting closely about the neck, between which and the patient, very warm water was placed, would accomplish both of these indications at once. Perhaps, to be more effectual, the water may contain humulus or chamomile, both long used in Germany, as remarkably good substances for fomentation, where a high and distressing state of excitement of the nervous system exists.

Whatever would secure *syncope*, though it might be hazardous, might also be effectual, as injections of an infusion of tobacco, or arteriotomy, extracting blood to that point. I write, supposing it to be the bounden duty of every humane man to say whatever may have occurred to him on the treatment of the disease in question, during his experience.

While I am writing permit me to correct three errors which I did not see until months after their appearance, in my paper on gangrene. Where I wrote very, *very* badly, "nine hundred,"-it was printed "*twelve hundred*," as the number of patients first at the Marine U. S. Gen. Hospital, New Orleans; where I wrote "*twelve hundred*," it was printed as *twenty-five* hundred, as the number it would contain. Where I wrote "fibula" in a case of resection, it was printed *femur*. Yours, etc.,

Rufus King Browne, M.D.

155, 40th street, N. Y., Jan. 20th.

Army Medical Intelligence.

REMARKS ON REGIMENTAL AND HOSPITAL DUTIES.

[Army Correspondence of the American Medical Times.]

Baltimore, Dec. 1862.

In the transfer of men from their regiments to general hospitals, and their return after recovery, there is need of strict and careful management. Some are brought on the most frivolous excuses. I have one now on hand who had an incurvation of the nail, which a slight operation of the regimental surgeon would have relieved in a week, and who needed in no wise the care of a general hospital. Another, who says his doctor sent him because he thought he was about to be sick, but it didn't come on. Many cases where there has been nothing more than slight muscular rheumatism, and hence these occupy the places of more critical cases. Many, once in hospital, vastly prefer it to life on the field; and American ingenuity finds vent in the direction of deception; others come honestly to the erroneous conclusion that they are not able to endure the rigors of the field, and the bare fact is that two-thirds of those who once get in hospital, even if they physically recover, are not worth as much by one-half for soldiers as when they entered. There is great defect in the whole management of transfer, and it is not the fault of the faithful heads of the Medical Department. As to the general hospitals, I am not much acquainted with the management of those outside of Baltimore; but with those here, I am familiar. They number eight, with capacity for about three thousand patients, and will, I think, compare favorably with any class of hospitals in our country.

Surgeon Josiah Simpson, U.S.A., is the Medical Director of the 8th army corps, and as such, has general superintendence of medical matters in this district. He is not only an able army surgeon of large and long experience, but a dutiful and efficient executive officer, bringing his department directly under his own circumspection, scanning all calls for supplies, strict as to discharges, and extends a careful surveillance over the whole medical interests of the corps. The hospitals here, both in their location and financial and general management, show the result of such scrutiny.

As many as possible are located where ample grounds can be secured, while those necessarily in the more crowded portions of the city are well supplied with the appliances for ventilation and general hygiene. Hence, diseases here have shown but little of an epidemic character; wounds have seldom been complicated by local adynamic influences, and although typhoid fever and erysipelas have sometimes been threatening as prevalent disorders, they have been only sporadic in their attack.

Conservative surgery is popular, and it is pleasant to see how by aiding nature, by good diet, good care, now and then an exsection or resection, and the prompt removal of spiculæ, many a bone inviting the novice to amputation is spared by the restrained hand of experience. Operations here are mostly secondary, and as far as I can ascertain, seem to have sustained the full average of success. The curiosities of surgical literature as to the course of balls, and the wondrous election by which they will course about and avoid important vessels, is exemplified in many an instance. It is interesting, too, to see with what facility simple gunshot wounds will heal, how even bone will rid itself of offending pieces and set up healthy action, and how successful the semi-expectant treatment often is.

Some of our most tedious cases are those where the tibia or bones of the tarsus have been injured; their superficial coverings rendering their recovery tedious, and necrosis often resulting. Judging from the number of the wounds of the os calcis, it would seem that the Confederates have the Achillean view as to the vulnerable part. Time and care, with now and then excision, generally, however, make good recoveries of such cases.

In fracture of the lower extremities, W. R. Smith's anterior splint is much in use. I have not been familiar with it heretofore, but it seems by its lightness, simplicity, and success, well adapted to a large variety of cases. In practical medicine, not less than in surgery, the war is affording to the medical staff a wide field of observation, especially as to those diseases affecting the digestive and respiratory organs. Rheumatism, phthisis, and chronic diarrhœa, are the more prevalent ailments at present, and large opportunities are afforded to compare various methods of treatment. The Medical History of the War, if prepared with that care and with that reliance upon undoubted facts which is attempted to be secured, will be a valuable addition to medical intelligence. There are many matters of interest to which I might refer, but my time and the patience of your readers forbid that I should occupy further space.

Ezra M. Hunt,
Assist. Surgeon, 29th New Jersey Vols.
In Charge of Calvert Hospital.

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(Circular No. 2.)

Surgeon-General's Office,
Washington, D.C., Jan. 23, 1863.

I. By order of the War Department, the first sentence of paragraph 3, General Orders No. 36, is modified to read as follows: "The final statements and all the discharge papers will be made out under the supervision of the Military Commander, and signed by him, when the soldier is not in a U. S. Hospital or under the charge of a U. S. Surgeon. But if he is under a U. S. Surgeon or in a U. S. hospital, the Surgeon will, in either case, make out and sign the discharge and final statements, after the Military Commander has endorsed the authority to discharge the soldier upon the usual certificates of disability."

II. Paragraph I, Circular No. 1, of 1863, from this office, is revoked, in consequence of the foregoing modification.

William A. Hammond,
Surgeon-General U.S.A.

The following advertisement has, by order of the Surgeon-General, been published in the Washington papers.

Surgeon-General's Office,
Washington, January 31, 1863.

It being reported that various parties have obtained money from invalid soldiers under the pretence of assisting them to their discharge from the service, notice is hereby given that certificates of disability for discharge to soldiers in general hospitals and camps are only given by the surgeons in charge of said hospitals or camps, and the obtrusive efforts of persons claiming to be special agents retard instead of hasten the preparation of discharge papers.

All soldiers are warned against giving money on such plea to any person whatever.

By order of the Surgeon-General.

Joseph R. Smith,
Surgeon U.S.A.

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ORDERS, CHANGES, &c.

Surgeon A. T. Watson, U.S.V., having reported to the Surgeon-General in person in accordance with Special Orders No. 14 from the Headquarters Army of the Potomac, and said order being in violation of General Orders No. 146, series of 1862, Adjutant General's Office. he has been ordered to return immediately to the Headquarters of the Army of the Potomac. and report to the Medical Director for duty.

Ass't Surgeon Joseph W. Merriam, 18th Massachusetts Vols., having tendered his resignation, has been honorably discharged from the service of the United States.

The resignation of Assistant Surgeon Lewis M. Eastman, U.S.A., has been accepted, to take effect January 19, 1863.

Ass't Surgeon A. J. Baxter, U.S.A., has been dismissed from the service of the United States.

The General Hospital on the Logan Estate, near Philadelphia, Pa., having been completed, Assistant Surgeon Van Buren Hubbard, U.S.A., has been assigned to the charge of it.

The bill for the better providing for the comfort of the sick and wounded soldiers has passed the Senate. Some amendments have been made.

Ass't Surgeon J. W. S. Gouley, U.S.A., has been ordered to report to Surgeon C. McDougall, U.S.A., for duty in charge of the St. Joseph's Hospital, Central Park.

In order that the friends of deceased soldiers may more readily distinguish their bodies, the Surgeon-General has issued a Circular to the various Medical Directors within the United States, directing that Surgeons in charge of Hospitals shall see that a card is attached to the breast of each body, having legibly written thereon the name of the Hospital, and the name, rank, company, regiment, state, and date of death of the deceased.

Medical News.

Anniversary of the Woman's Hospital Association.—The Anniversary of the Woman's Hospital Association was held at the institution, No. 83 Madison avenue, New York, Saturday morning, Jan. 31, 1863. Rev. Dr. Vermilyee read a selection from the fifteenth chapter of Matthew, and made a prayer. Dr. Metcalfe, President of the Medical Board, spoke of the present condition of the hospital, and of the benefits that had been bestowed on humanity by the establishment of this institution. The operations necessary for curing and relieving those applying at this place are such as the surgeon, or physician, in general practice, cannot successfully perform. To attain the requisite dexterity or knowledge, it is important that great numbers of cases should be seen, and carefully studied; and this is only possible in an establishment like the Woman's Hospital. So high is the reputation acquired by Dr. Sims, the former surgeon in charge, that in France, where operations are acknowledged as second to none in the world, the opinion and assistance of Dr. Sims are eagerly sought by the most eminent men of the profession, in cases presenting unusual difficulties or danger. Since the formation of our hospital many have been restored to health who were considered incurable. The last year over 400 out-door patients received medical and surgical aid gratuitously, besides the free list in the institution. Fifty are attended to each week, from whose homes they could not be spared to remain in the hospital. Each county in the State is entitled to a free patient, so that all may exert individual effort for the better support of the present hospital, and enable the building to be erected for enlarged benevolence and better accommodation. Dr. Thomas Addis Emmet has the charge of the hospital. Many will gratefully remember his kindness and skill in restoring them to health. He has been associated with the institution almost from its commencement.

Medical Board.—*Consulting Physicians.*—John S. Metcalfe, M D., President; Ed. Delafield, M.D.; Horace Green, M.D., LL.D. *Consulting Surgeons.*—Valentine Mott, M D., LL.D.; Alex. H. Stevens, M.D., LL.D. *Surgeons.*—J. Marion Sims, M.D.; Thomas Addis Emmet, M.D. *House Physician*—G. Storrs Winston.

Original Lectures.

LECTURES ON MILITARY SURGERY.

DELIVERED AT THE
COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.

By WILLIAM DETMOLD, M.D.
PROFESSOR OF MILITARY SURGERY AND HYGIENE.

LECTURE VII.

Gunshot Wounds of the Trunk and Extremities.—Cases which require Primary Amputation, etc.

Gentlemen:—Gunshot wounds of the abdomen, with lesion of the abdominal organs, are more fatal than corresponding wounds of the thorax. The cases of recovery from such wounds are exceedingly rare. The effusion of the contents of the intestinal canal into the cavity of the peritoneum, and the thence ensuing peritonitis, form an additional element of danger which does not exist to the same extent in wounds of the thorax. Little can be done, and little should be done, in these cases, besides rest and opium.

Where the bladder is wounded you should, as much as possible, prevent extravasation of urine. Apply the catheter and retain it in the bladder; if it cannot be borne it may, in some cases, become expedient to make an opening in the peritoneum to keep the bladder constantly empty. There are a number of cases on record where bullets have lodged in the bladder, and the patients have recovered. Larrey has extracted the bullet in such a case by lateral section. I myself have seen such a case, and was on the point of operating for it when the man changed his mind, preferring to keep his bullet, which he had already carried three or four years with the ordinary symptoms of stone in the bladder.

By far the majority of all the gunshot wounds which claim the attention of the military surgeon are wounds of the extremities; because, 1st, the extremities combined offer a larger surface than the trunk; 2d, part of the trunk is in many positions protected by the extremities; and 3d, because almost all those who remain dead on the field, and who generally average about the proportion of one to five wounded, are wounds of the trunk. The wounds of the extremities form not only numerically the majority, but they besides require generally more of the skill and judgment of the surgeon. The severer wounds of the trunk, if not immediately fatal, are yet in most cases beyond the skill of surgery, and it is comparatively very rarely that an operation is required; the slighter wounds are usually unimportant. The all-important question of sacrificing the wounded part for the purpose of saving the rest of course only comes up in wounds of the extremities.

There is such an essential difference in the respective danger of gunshot wounds of the upper and lower extremities, that the treatment must of necessity be materially influenced by the prognosis. Thus the same wound which in the lower extremity would require the immediate sacrifice of the limb for the purpose of saving life, would admit in the upper the attempt (often successful) of saving both limb and life, or at least the performance of a conservative operation, such as resection. On the other hand, in a severe wound of the upper portion of the femur, resection or exarticulation may be regarded as out of the question, because it hastens, as ample experience has proved, the fatal issue, whereas a corresponding wound of the humerus admits of an operation, either resection or exarticulation, which, in a large proportion of cases, proves successful.

Gunshot wounds of the extremities, where no bone or joint has been injured, generally heal kindly in from three to six weeks; should much subfascial inflammation and swelling supervene, free incisions through the fascia will relieve the swelling, and by giving free exit to the secretions prevent the further burrowing of matter. Where the fasciæ are involved, especially if a bursa in the neighborhood of a joint has been wounded, the patients frequently succumb to diffuse inflammation and protracted suppuration; free and early incisions, as soon as fluctuation shows itself, together with gentle circular pressure by means of a well applied roller, with liberal support of the general system, are the means to be pursued in these cases.

I have already, in a former lecture, stated to you that the results of primary amputation are much more favorable than those of secondary. This is probably owing mainly to the fact that in the first the operation is performed in and through healthy parts, which have not yet been drawn into that destructive inflammatory process which is so apt to follow gunshot wounds. The indications for primary amputation may be divided into two general divisions: 1st, Where a limb is so extensively injured that its preservation is *prima facie* impossible; this of course applies to the upper and lower extremities; 2d, Where experience has taught us that in the large majority of such wounds nature succumbs in its attempts at reparation.

The first class embraces all cases where a limb has been entirely or partially carried away by heavy projectiles, large pieces of shell, solid round shot, or by explosion; where the bones have been splintered or comminuted to a great extent, the splintering extending into a joint, or if at the same time the large vessels and nerves are divided. The first you will recognise, not only by the direction of the wound, but by the absence of pulse below the wound; the second by the entire or partial paralysis of sensation. To decide upon this, however, you must wait till the collapse from the shock has ceased, because during the stage of collapse both pulse and sensation may be suspended, and return after reaction sets in. In all these cases where amputation is, so to say, an absolute necessity, it should be performed as soon as possible after the receipt of the injury, the patient's chances for life diminishing exactly in proportion to the time lost between injury and operation. In most of these cases of amputation the surgeon must use his judgment in deviating from the rules laid down in text books with regard to the manner of operating and the formation of the flaps. The soft parts being lacerated you must take the flap where you can get it, without amputating higher up than is absolutely necessary: for you must bear in mind that, independent of the advantage of preserving as much of a limb as possible with reference to its usefulness afterwards, the danger to life increases as you amputate nearer the trunk.

The second indication for primary amputation, including, as I have stated, those cases where experience has taught us that the majority of cases terminate fatally, refers almost entirely to the lower extremity. In the upper extremity. where there is the slightest chance for preserving the limb, there is no necessity for primary amputation. The restorative process goes on generally much more favorably in the upper extremity, and the danger to life from secondary amputation is proportionally less.

In gunshot fractures below the knee, unless the bones are extensively splintered or the ankle-joint opened, you are justified to give the patient a chance for the preservation of his leg. But wherever the knee-joint is involved in the fracture, or where the femur is broken, the best authorities agree that primary amputation saves the larger proportion of lives. I should, therefore, state to you as my conviction, that the sphere for primary amputation is limited to wounds of the knee-joint and fractures of the lower half of the femur. Amputation in the upper half of the femur (even primary) has proved so generally, I may almost say so uniformly, fatal, that I should prefer to let these cases take their chance without amputation, or, at any rate, wait for secondary amputation.

I have observed that good military surgeons pass, as it were, through three stages in their judgment of gunshot fractures of the thigh: the first is, they do not regard these wounds as so dangerous as they really are, and therefore, in their early military life, hope more from the efforts of nature; they are unwilling to sacrifice a limb where there is a small gunshot wound without much other injury to the soft parts, and an apparently simple fracture of the femur. They do not take it into consideration that such a fracture does not go on as a fracture under the circumstances usually does, that is, the secretion of plastic lymph which gradually consolidates into callus. In these gunshot fractures the bone most frequently becomes necrosed to a considerable extent, and in after examination we do not find the slightest effort at repair made by nature. After the surgeon has had an opportunity of witnessing this result in the majority of cases, he hopes for better results from primary amputation, and is apt to be for a time a warm advocate of it; but after bitter experience has shown that thigh amputations for gunshot fractures are in themselves so dangerous that but few survive, he then settles down into a good, prudent, and conservative surgeon, who calmly calculates the chances, who will never operate for the sake of operating.

I cannot warn you in sufficiently strong language against that (I must call it morbid) desire for carnage which I have witnessed in some surgeons, who seem to think that the main object of a war is to give young surgeons a chance to operate, and who count their laurels by the number of limbs cut off.

Statistics, especially in military surgery, must always be somewhat deficient; yet I hope that the judicious efforts made by our Surgeon-General will throw some more light upon this most important subject, and for that purpose I want two facts placed broad and square before the world:

1st. How many men have been furnished with artificial limbs after recovery from thigh amputation, with the history of their cases? and

2d. How many men have been discharged or invalided on account of gunshot fracture of the femur without amputation?

Original Communications.

CASES IN MILITARY SURGERY.

By HENRY N. FISHER, M.D.,

ACTING ASSISTANT SURGEON U.S.A., ECKINGTON GENERAL HOSPITAL, WASHINGTON, D. C.

I.—*Gunshot Wound of Face.—Traumatic Epistaxis.—Ligation of Common Carotid.—Death.—Autopsy.*—Corporal James Quick, 38th N.Y.V., aged 21, was wounded at the battle of Fredericksburg, Dec. 13th; admitted to Eckington Gen. Hospital on the 18th. The ball passed in below the left ear and made its exit on the left side of the nose. The face was very much swollen on the left side; the left eye closed but uninjured. Was treated with cold water applied locally. On Christmas evening secondary hæmorrhage occurred from left nostril; more than a quart of blood was lost in a few minutes. I promptly plugged the nostril with bits of muslin strung on a thread, which stopped the bleeding. It recurred at night, and was controlled by thrusting in more of the *tampon.*—Dec. 26. Had another bleeding, the blood now flowing copiously through the wound at the side of the nose. A compress applied snugly over the orifice controlled the hæmorrhage again.—Dec. 27. Another brisk flow of blood occurred this morning, but it was promptly stopped by increased pressure over the compress. On consultation it was agreed that the only recourse was to ligate the left common carotid artery. Accordingly I tied that vessel just above the omo-hyoideus muscle, the patient not being etherized. The plug and compress were then removed, and no hæmorrhage occurred.—Dec. 28. Slept well last night with the aid of an anodyne. This A.M. pulse 120. A slight pulsation detected in the left temporal artery. Was to-day afflicted with diarrhœa; the discharges being thin and light colored.—Dec. 30. Pulse now 150. Mind wandering. Is very restless. Diarrhœa still continues. Ordered opium one gr. every four hours, and brandy and beef tea continued.—Jan. 2. Is quite insensible, but answers when roused. Skin cold, pulse 140 and weak, swallows fluids now with difficulty and cannot swallow solids. Is furnished oysters, which he swallows readily. The wound looks sunken and glassy. Passes frequent stools involuntarily.—Jan. 4. Wound of neck suppurating. Still in a stupor. Diarrhœa continues. In P.M. a serous discharge mixed with blood appeared from wound of neck, giving reason to fear hæmorrhage from the artery.—Jan. 5. At 3 P.M. I was called in haste and found the carotid had given way, and the blood was flowing, *per saltum*, from the wound, and in a few moments the patient was dead. I examined the point of ligation after death, and found the artery ulcerated through anteriorly where the ligature was applied. No attempt at union of the inner coats of the vessel was found, and no fibrinous deposit on the cardiac side, it having been doubtless forced out by the hæmorrhage. The distal side was, however, occupied by a plug extending up to the bifurcation of the vessel. The common carotid artery, from its origin to a little above its bifurcation, I removed and preserved. The gunshot wound was not examined.

II.—*Dislocation of the Humerus under the Coracoid Process.*—Barney McNaelis, private, aged 32, was injured at Fredericksburg, and admitted four days after. His account of himself is as follows: He was resting on his right knee, and was putting the cap on his gun, when a horse passing behind him was struck by a shell, and fell heavily upon him, throwing him forward with his right arm under him. It was some time before he could extricate himself. He immediately suffered pain in the right arm and shoulder, and was unable to raise the limb. The forearm was semiflexed and incapable of motion, as he said it hurt him to flex or extend it. I found the head of the bone lodged directly under the coracoid process. This being considered by me a rare dislocation, I requested my colleagues Drs. Marvin, Edelin, and Birkie, to examine it, and they were of my opinion as to the nature of the dislocation. The patient was etherized, and I readily reduced the bone by making extension on the arm while I pushed my foot into the axilla.

III.—*Gunshot Wound of the Skull with Depression. Operation.*—Private W. H. Holcomb was wounded at Fredericksburg, Dec. 13, by a rifle ball, inflicting a severe scalp wound, and a gaping fracture of the skull was found at its bottom, situated over the right parietal os. He came here four days after. He was rational, but his mind was much confused. There was some dysphagia, no paralysis, but a constant tingling pain in the *right* arm and hand.—Dec. 19. Physical condition the same, but mind is almost entirely gone. I called a consultation, and it was determined to operate. I forthwith proceeded to the operation. On laying back the scalp about the wound the fracture was found to be stellate, and a portion of bone depressed. The trephine was applied and a button removed, when the depressed portion was easily elevated. The internal table was found to be badly comminuted. A radiating tongue of bone was removed with a Hey's saw, and a large number of spicula from the inner table were taken away. The dura mater was rough and discolored, but not lacerated. The wound was partially closed and cold water dressings applied.—Dec. 20. Patient lay in a stupor, but rational when roused; pulse 80 and soft. Bowels open.—Dec 21. Quite comatose. After consultation I made a crucial incision in the membranes, but no clot or pus was found. Continued to sink, and at 3 P.M. he died. On post-mortem examination the membranes were found congested, but were unchanged, save the roughening and discoloration about the wound. On removing the membranes the surface of the cerebrum was found to be in a pulpy disorganized condition for a space of an inch and a half about the wound. The convolutions were obliterated, the white and grey substance being undistinguishable, and the tissue a disorganized mass, so thin that several drops ran by their own gravity upon the table. The rest of the brain was healthy. The disorganization was found to extend down to a level with the lateral ventricle and inwards almost to its outer margin. No foreign body was found, nor was the opposite hemisphere at all injured by *contre coup*.

REMARKS ON
THE EVILS OF YOUTHFUL ENLISTMENTS
AND NOSTALGIA.

By DE WITT C. PETERS,
ASST. SURGEON U.S.A.

The Surgeon-General U.S.A., in his recent report to the Secretary of War, justly deprecates the policy of enlisting youths who have not attained their proper majority. The statistics and experience of the U.S. Army conclusively demonstrate, that persons received at the minimum standard of eighteen years are, in a majority of cases in this country, not sufficiently matured in mind and body to undertake successfully the arduous duties of a soldier. These young recruits readily contract the various diseases incident to camp life, and are extremely liable to prove a burden to the service, while prematurely their health is seriously undermined, if not ruined for ever.

In France, where the conscript is drafted at the age of eighteen years, and sometimes younger, he is allowed a period of probation, before being ushered into the severe exposure and variable climate to which he may be liable in after life. The French train up even their children to look and to be soldiers; therefore, on entering the service, they require only to perfect themselves to act in large bodies, to guard their health, and to learn the exercise of some particular arm. These raw levies are in times of peace treated with great leniency in respect to their tender years, and thus cautiously they are brought to a maximum state of development and hardihood. The robust and most proficient of them, after due trial in the "regiments of the line," are selected to fill up the ranks of the regiments whose names have long been familiar in every land.

The real military strength of the United States rests in its volunteer system, which, however imperfect it may be, has of late astonished the civilized world by the numbers and prowess of its legions. Much depends on the medical staff to render this system efficient. Hence, instead of being anxious to obtain numbers, all officers should be governed by a desire to select none but serviceable men. Like rules should govern both the volunteer and regular service in enlisting recruits. Yet at present in this respect how widely they differ! Cases in which young men, although victims to some incurable disease, are solicited to enter the army, and with a mere farce of an examination on the part of their officers, are passed, are by no means rare, as the records of our General Hospitals can attest. The reason usually given for this loose manner of filling up companies, is that the law demands a certain number of men before the regiment can be mustered into service, and consequently a large percentage of these unsound persons are received as soldiers. These soon strikingly exhibit their inability to fulfil their sworn obligations, and are turned over to the Hospitals, where they undergo thorough examination before being discharged. If the cost to the Government of clothing, equipping, transporting, feeding, furnishing medical attendance, and paying these military impostors, were accurately computed, the amount would no doubt startle the reader, and might cause the evil to be immediately corrected by proper legislation. In the Regular Army the folly of enlisting poor material is well understood by both officers and men; therefore the recruit is subjected to the most rigid examination, and even then may be taken on trial at some depot for recruits, and again be submitted to a scrutinizing inspection, before being admitted into his future company and regiment.

The fresh and youthful American volunteer leaves his home flushed with patriotism, and animated by new associations. If he be from the rural districts, he is to all appearance the personification of perfect health. Stimulated by bright anticipations of the future, he may for a time resist the inroads of disease; but in a few months the novelty of long marches, guard duty, exposure, and innumerable hardships, has vanished, his mind begins to despond, and the youth is now a fair victim for fever or some other terrible scourge that is to wreck his constitution and blight his hopes. In contrast with his case is that of his older and more sturdy companion. In him we see the *man developed* before quitting his peaceful pursuits. Both are tried by the same surrounding influences, yet the balanced mind of the latter acknowledges but few worldly disappointments, and his physical economy, by obeying the judicious laws of hygiene, soon adapts itself to the man's new mode of existence. The very young soldier, it has been remarked, wears better in the cavalry than in the infantry branch of the service, and in that sphere he may have a chance to cope successfully with his hardier comrades. It is perhaps the exciting and healthy life he thus leads, the attachment he quickly forms for his horse, and his ambition to excel, that buoy up his spirits and strength against contagion in its worst forms.

The importance of strict discipline in preserving health is not at first recognised by new military organizations. Without it little can be done towards keeping clean the quarters of the men, their accoutrements, and their persons, which, taken collectively, are not unfrequently the exciting causes of many epidemics. The selecting of suitable camps, and the paying strict attention to the cooking of soldiers' rations, are responsibilities resting upon officers, and no ligh tones either, if they have the least desire to promote the comfort and welfare of those under their charge. It is by a lack of discipline, confidence, and respect, that many a young soldier has become discouraged, and made to feel the bitter pangs of home-sickness, which is usually the precursor of more serious ailments.

That peculiar state of mind denominated nostalgia by medical writers, is a species of melancholy, or a mild type of insanity, caused by disappointment and a continuous longing for home. It is frequently aggravated by derangement of the stomach and bowels, and is daily met with in its worst form, in our military hospitals and prisons, and is especially marked in young subjects.

The symptoms produced by this aberration of the mind, are first, great mental dejection, loss of appetite, indifference to external influences, irregular action of the bowels, and slight hectic fever. As the disease progresses it is attended by hysterical weeping, a dull pain in the head, throbbing of the temporal arteries, anxious expression of the face, watchfulness, incontinence of urine, spermatorrhœa, increased hectic fever, and a general wasting of all the vital powers. The disease may terminate in resolution, or run on into cerebral derangement, typhoid fever, or any epidemic prevailing in the immediate vicinity, and frequently with fatal results. Among young prisoners of war it is the worst complication to be encountered, as the writer can truthfully affirm, after a few months' experience in treating several hundreds of these prisoners under the most favorable circumstances.

Fresh troops serving in the extreme South, where mail communications are irregular, and where the climate is very debilitating, suffer terribly this affection. The hospitals of New Orleans and its vicinity, during the past summer, were filled with such cases, complicated with fevers and diarrhœa. The majority of them were young men from the Eastern states, whose love of home and kindred is a characteristic trait.

The diagnosis of nostalgia is not difficult in its early stages, although the patient may be unwilling to confess his mental weakness. It may possibly, however, be confounded with a depressed state of the mind, resulting from unexpected and sad intelligence.

The treatment of nostalgia would appear very simple, could we always at its onset remove the exciting cause, by allowing the patient the free exercise of his will; but from obvious reasons this is usually an impossibility. The strict rules, usages, and exigencies of military service are insurmountable barriers against granting too free indulgence to soldiers. The surgeon must carefully attempt to relieve the patient's mind of its injurious burden by other means, such as kindness, free exercise, bathing, and agreeable associations, while he improves the tone of the stomach and bowels by generous diet and tonics. In cases where complications exist, notwithstanding his zealous efforts, the symptoms will frequently baffle his skill, and then as a *dernier ressort*, and in order to save life, or prevent permanent disability, he must recommend the man's discharge from the service.

REMEDIES

WHICH HAVE BEEN FOUND MOST USEFUL IN U. S. MARINE HOSPITAL, NEW ORLEANS, IN SOME DISEASES OF SOLDIERS.

By RUFUS K. BROWNE, M.D.,

SURGEON IN CHARGE.

I.—In debilitated, but not *particularly* anæmic state of the patient,

℞. Cinch. rubr. ℥ ij.
Anthemis ℥ ss.
F. ex. gentianæ ʒ ij.
Tr. aurant. cort. ℥ ij.
Sodæ bi-carb. ʒ ij.
Aquæ ℥xxxij.

Boil twelve minutes and strain. Dose, half a teacupful every two hours.

This *un*stimulating tonic recipe has been found to be highly restorative, after others have been ineffectual. Sometimes I have used instead of anthemis, the tinct. colombo and quassia. The latter, obtained by maceration, in a menstruum of water, camphor, bi-carbonate magn., and saturated with carbonic acid gas, was found the most *radically* effective of all the tonics used.

If the patient be greatly enfeebled, and the digestive organs and their direct dependencies much so, consequent on protracted illness with diarrhœa, follow each dose of the above with,

℞. Santa Cruz or Jamaica rum ℥ i.
Pulv. zingiberis gr. v.

or if the patient be particularly *anœmic*, reduced in flesh, with inability of the muscular system, give after each dose one pill of

℞. Pulv. strychnos nuc. vom. gr. j.
Pot. tartrat. ferri gr. v.

This form of iron has been found to exceed various others as a means of inducing replenishment of the active elements of the blood. This and the tinct. of quassia, I have stated, alternated, will alone constitute an exceedingly effective tonic; and where a tonic only was indicated it has shown its superiority over all the "bitter tonics." The same has been proved to be true of the rum, compared to either brandy or whiskey. I doubt the benefit of ever using the latter, where there has long been relaxation of the bowels.

The watery tincture, made as above described, is greatly preferable, where only a tonic influence is sought, to the alcoholic; for in the latter the menstruum itself being stimulating obliterates or nullifies the integrity of the ends of the peculiar qualities of the medicine it holds. I am confident from my recent experiences that this is the case, apparently for the reason that the stimulated condition of the stomach, which is the immediate effect of the menstruum, is *not* that which the medicinal virtues it holds should be addressed to. If a stimulant is given let it be given for its effects alone, and the best of fluid stimulants is either port, heavy-bodied Bordeaux, or rum.

Again, I am satisfied that the tinct. of cinchona thus obtained, is superior as a *tonic* to sulphate of quinine, for it contains what sulphate of quinine does *not*. The unbleached kind of the latter is the best of the two. Where the latter is given with reference to an intermittent patient's condition it is better to mix it with a small proportion of morphine (gr. 1–12.) Large doses of quinine, something more than even grains, appear to me prejudicial to the system, though perfectly effective as an anti-periodic; how, I cannot yet make out. I do not on that account, however, suggest the giving of less doses.

ANTI-PERIODIC.

I have usually adopted the following for abbreviating the chill:

Rum ʒ j.
Pulv. capsici gr. iv.
" zingiber. gr. iij.

Add hot water—taken quite hot. If the chill be quite severe a little pulv. ipecac may be beneficially added. For febrile conditions of the system, where the rate of the pulse is high, as in pneumonia, or gastric irritation, or common fever, a combination of squills and tinct. veratrum viride is unfailing; by it you rapidly modify the temper of the circulation, but there its efficacy ends. The combination is not a remedy in any other sense; whatever else is to be done requires something else. The topical application of veratria and glycerine has proved very convenient and efficacious in the permanent relief of superficial pains.

The following recipe has been found an *un*failing and *un*disturbing evacuant of the bowels, alike so where there is frequency of the discharges and consistency, or constipation, following them,

℞. Ol. ricin. com. ℥ ss.
" olivi ℥ ss.
" tiglii gtt. j.
Es. ol. piper. menthæ gtt. iv.

It is especially invaluable where you are oppressed with the apparition of Scylla or Charybdis—the *dread* of a return of an exhausting condition of the bowels, or a *fear* of continued constipation.

The peculiar advantage of this recipe is, that while it is unfailing as a thorough evacuant it leaves the bowels in a perfectly undisturbed condition, without provocation to repeated discharge, or jaded to subsequent torpidity. I am aware that as much is frequently said of other remedies for a similar purpose, but I know of none that is equally unfailingly efficacious, while it is agreeable to the intestinal canal. When a stirring or renovating effect is required from the stomach, or the liver, by means of their vascular coalition, hydrargyri chlor. mitis may be added to it or may precede it. With this addition it is especially efficacious in renewing the normal action of a torpid liver, and inducing the onward passage of unduly collected biliary ingredients. The fæcal discharges will be at once, and so far as I have seen, uniformly as characteristic as those of the action of mercury in young children.

I am not yet wholly confident of the fact, but strongly inclined to it, that this evacuant is better in the purgative plan of treating common diarrhœa than any of the saline compounds.

As regards that plan it is perfectly *rational* as well as successful, since it is evident to the least reflection that the state of the active alimentary canal, whatever it may be *after* the medicine has effected it, cannot be the *same* as *prior* to that effect. It will hardly pass the "muster" of reason to say that the fact there is copious discharge in one case, *and* the other proves the identity of the pathological condition of the canal before and after the remedy, any more than to say that the nausea of pregnancy, and that from totally different causes, proves the *same* condition of the stomach. In that plan of treating diarrhœa the change effected by the medicine is frequently of itself alone curative. Neither is it any better philosophy to say as explanation, that the cause of the diarrhœic state of the alimentary canal is retained fæces, and that the saline compound removes these, leaving that state *un*changed so far as its effect is concerned, the change, if there is one, being mostly due to the *removal* of these fæces. But even this is ineffectual as an explanation, for these fæces are not *removed* by the medicine (as we flush a ditch), but by the action of the alimentary canal which has been induced by the medicine. It is the alimentary canal which evacuates, and that which prior to the influence of the medicines it could not or did not evacuate. There was thus in *fact* some *change* induced in its state by the influence of the saline compound, and this is precisely what we first said. I find here the tartrate of soda to be the best of saline cathartics, and the following to be the very best pill where fæces have collected mainly in the lower part of the bowels, and then become more or less consolidated :

℞. Aloet. socotrin., gr. xx.
Acid sulphurici dilut., gtt. x.
M. f. pil. No. 4.

one to be taken every hour until discharged. However long the constipation, this will always relieve the bowels with very little or no sense of its *effect*. For, again, the discharge of the fæces resists the effect (though it is always called so) of the medicine. That *effect* is on the bowels, which is not fæces, but an animate structure. The effect, if any, consists in that. In making just such discrimination, and hence corrections, as these two instances, scientific progress consists, however little this may be towards it. As to the first of these two recipes, it completely combines the full measure of the certain efficacy of the oleum tiglii, devoid of its irritating or straining effects, with the insipid and mollifying effect of the ricinus communis. When it contains the essential oil it has always appeared to me to have a perceptibly mollifying influence on any prior tenderness of the bowels, even before the discharge takes place, and the bowels are evacuated without any prior sense of irritation in the bowels or the rectum at the moment of discharge. It is peculiar that they are uniformly two in number, nor do they ever leave that sense of weariness—that feeling of "goneness" [*vide* patient s clinical nomenclature] referred to the alimentary canal, which is the invariable concomitant of the use of saline cathartics. Of these latter the one which leaves the very least of this, and is thoroughly effective, is "tartrate of soda," which has been found, if repeated doses of a saline cathartic are required, to have properties and effects scarcely objectionable. It does not fail in moderate doses, and is superior to citrate or sulphate of mag. or bi-tartrate of potassa, is a gentle refrigerant, and especially their superior in the design of aperient effects in febrile diseases. It does not ever disturb the normal state of the kidneys, and unless the patient is much depleted of the animal fluids occasions no sense of thirst, but the contrary. Where the stomach is not acid, and there is a reactionary state of the bowels from previous diarrhœa, and the tonic first named is indicated, institute tartrate of soda, a large proportion for the bi-carbonate.

I only attach the merits to these I have represented, because these merits are important virtues, where you are kept by diarrhœa under a constant reign of fear of interfering with your patient's bowels by aperients, if you have once been so fortunate as to arrest the exhausting discharges. The simplest farinaceous diet will frequently return these, and from that moment the patient may date his declension to death. He will live and linger, but finally he succumbs, worn, worried, and weakened to death. This was the brief history of hundreds of cases until the autumn set in.

DIARRHŒA.

I have sometimes arrested the continuance of this exhausting form of diarrhœa, when every other article in the hospital dispensary had failed, by

℞ Pulv. resinæ communis gr. viij. or x., given in water, pulv. acaciæ, or even powder of arrow-root may be added to this, if the discharges are streaked with blood.

In that case also the following:

℞. F. ex. gentian. ʒ ij.
F. ex. senegæ ʒ j.
Syr. ipecac ʒ ij.
Gum. acaciæ ʒ i.
Aquæ ℥ ij. M.

A teaspoonful every two hours. The senega is a restorative; *how*, I do not know. I have invariably found it a useful adjunct in tonic mixtures. The nearest a uniformly efficacious diarrhœa powder, and generally efficacious where the diarrhœa has not been long uninterrupted, is

℞. Pulv. gum. acaciæ ʒ ij.
Cretæ prep. ʒ j.
Pulv. kino ʒ i.
Pulv. ipecac. gr. v.

Div. in p. æq. No. xx., one after each discharge. This with mucilaginous drink, where there is torpidity of the bowels, in the highly enfeebled, if we suspect but little fæcal contents, and dread any disturbance of the system, and the stomach and perhaps bowels are weak.

℞. Ol. ricini ℥ i
Ol. morrhuæ ℥ ss.
Gum. acaciæ ʒ ij.
Aquæ menth. pip. ʒ iv.
Tr. opiigtt. xl.
Spts. terebinthinæ gtt. xxv.

A tablespoonful every two hours. It is particularly useful where there had previously been intestinal capillary hæmorrhage, or where there is continued intestinal torpidity, and the patient is confined to his bed.

In moderately reduced states of the system, where there is almost a daily recurrence of slight febrile symptoms without rigor, give

℞. Tr. serpentariæ ℥ j.
Tr. rhei ℥ j.
Tr. zingiberis ℥ j.
F. ext. valerian. ʒ j

Tablespoonful every two hours. The nervine in combination with the ginger is a particularly kind but efficacious queller of the febrile temper. I have never found any particular benefit from serpentaria alone. Of that and in such a case the tincture is better than the infusion. For immediate and entire subsidence of flatulent colic or pain,

℞. Liquor, ammon. } *aa.*
Chloroform

gently rubbed over the epigastrium is particularly efficacious.

Of course none of these receipts are the product of refined pharmacy. It is because they are not, and that their ingredients may be found in any of the army dispensaries, that I recount them; they are general remedies, and now is the moment when, in nearly similar conditions elsewhere, they may be found very useful.

Reports of Hospitals.

BELLEVUE HOSPITAL.

CASE OF HYDROPHOBIA.

[Reported by Dr. T. K. CHANDLER, House Surgeon.]

WM. O. LEAHY, æt. 48, native of Ireland, a laborer, was admitted to Bellevue Hospital, Jan. 7th, 1863. Service of Dr. Alfred L. Loomis.

History.—Has always been temperate and healthy, with no predisposing tendency to disease. Between two and three months ago he was bitten in the palm of his right hand by a dog which was not supposed to be rabid, and which was afterwards killed. The skin was lacerated, and bled somewhat, but the injury excited no apprehension in the mind of the patient, and he did not mention the incident to his family. He continued perfectly well until Tuesday the 6th of January, when he began to experience pain in the right arm and shoulder, but referred it to a wetting which he received the day previous. On Tuesday evening he complained of chilliness and of a difficulty in swallowing, and on Wednesday these symptoms were aggravated. The patient could not swallow owing to a spasm in the throat, and complained of feeling very cold; he also hawked and spit a great deal, and made frequent attempts to vomit. The manner of the patient was hurried and peculiar, but his friends did not regard him as being deranged until towards evening. At six o'clock P.M. he was admitted to the hospital, at which time he presented the following symptoms:—He was extremely agitated and restless, and in constant and rapid motion. He talked wildly and incessantly, and would sometimes look anxiously about the room and under the bed. His pupils were somewhat dilated, his tongue moist and slightly furred, and his pulse strong and rapid, being about 140 beats per minute. The patient was constantly spitting a tenacious mucus, and once or twice he vomited a greenish fluid. When urged to drink, he would carry the cup slowly and hesitatingly to the angle of his mouth, often stopping in the act, and then with a sudden motion, and with evident effort, would take a single swallow. After tasting any fluid he would immediately pass water, his necessity being apparently most urgent.

This general condition continued with but little change for several hours. Sometimes the patient would become composed, and would lie down and cease talking, but these intervals of quiet were evidently due to exhaustion.

At ten o'clock treatment was commenced by giving him a grain of opium, or its equivalent in Majendie's solution, every hour for four hours. Under this agent the patient gradually became more calm, and remained quietly in bed most of the time. At half-past two o'clock his pupils were moderately contracted, the number of respirations reduced to seventeen in the minute, and his pulsations to ninety-two. He slept none. He could now swallow fluids without much difficulty, and would at times talk rationally.

The opium was now suspended for two hours, during which period the patient remained much the same; it was then renewed, and continued in about the same doses, and with the same results, until nine o'clock A.M.

Towards morning the pulse became more weak and frequent, and an ounce of brandy, together with beef-tea, was given every hour by injection. At half-past nine o'clock the patient began to stagger, and complained that he could not see. He was at once placed on the bed, when his muscles grew rigid, presenting the appearance of a general tetanic spasm. His body became curved like a bow, being supported by but two points, the top of his head and his heels.

During the continuance of the spasm, which lasted two or three minutes, the patient grated his teeth, his eyes were rolled up, and his face became livid, but he did not foam at the mouth. Two similar fits or spasms quickly succeeded the first, and these were the only ones the patient was observed to have during his illness. He died soon after the third fit.

Sectio Cadaveris.—Rigor mortis well marked. The abdominal muscles were in the same state of tension as during the continuance of the general spasms. The thoracic and abdominal organs were essentially healthy, save that the kidneys presented slight traces of Bright's disease. The meninges of the brain and spinal cord were, however, markedly congested, but the pia-mater more than the dura-mater. Dr. H. W. Cook made a careful microscopical examination of the substance of the cord, but found no lesion there.

Six young natives of Algeria are to be admitted into the School of Medicine of Algiers after special examination, and then sent forth into their native provinces as doctors of medicine. This liberal conduct of the government, says the French journalist, contrasts favorably with that of the English government, which refuses to admit into the army graduated natives of India as medical men.—*Brit. Med. Journ.*

Reports of Societies.

FIFTY-SIXTH ANNUAL MEETING OF THE UNITED STATES MEDICAL SOCIETY.

The Society met pursuant to Statute, in the room of the Court of Appeals, Capitol, at 11 o'clock Tuesday morning, and was called to order by the President, Dr. Thomas Hun, of Albany.

The following gentlemen registered their names, and took their seats:

Thomas Hun, Albany; Sylvester D. Willard, Albany; O. White, New York; A. L. Saunders, Brookfield, Mad. Co.; James Lee, Saratoga; M. M. Wood, Greene, Chenango; Jas. Ferguson, Glens Falls, Warren Co.; D. P. Bissell, Utica; Thos. W. Blatchford, Troy; J. G. Snell, Amsterdam, Montgomery Co; N. H. Deering, Utica; Simon Snow, Root, Montgomery Co.; U. Potter, Hallsville; E. F. Arnold, Yonkers, Westchester Co.; L. A. Smith, New Jersey Medical Society; B. J. Raphael, New York; B. P. Staats, Albany; Henry S. Downs, New York; N. C. Husted, New York; H. W. Dean, Rochester; D. Bly, Rochester; Joel Foster, New York; Chas. Barrows, Clinton, Oneida Co.; S. M. Van Alstyne, Richmondville, Scho. Co.; Jas. H. Wood, New York; Darwin Colvin, Clyde, Wayne Co; O. M. Allaben, Delaware Co.; Hiram Corliss, Greenwich, Wash. Co.; Peter P. Staats, Albany; T. B. Reynolds, Wilton, Sar. Co.; Isaac E. Taylor, New York; J. Stearns, Pompey, Onondaga Co.; Julius Auerback, Rockville Centre, Queens Co.; Caleb Green, Homer, Cortland Co.; Geo. Cook, Canandaigua, Ont. Co.; H. N. Porter, Lee Centre, Oneida Co.; Hiram Adams, Fablus, Onondaga Co.; J. V. Cobb, Rome, Oneida Co.; M. L. Finch, Jonesville, Saratoga Co.; S. H. Freeman, Albany; T. C. Finnell, New York; Guido Furman, New York; Moses C. Hasbrouck, Rockland; Chas. C. F. Gay, Buffalo; Sandford Eastman, Buffalo; Wm. Taylor, Manlins, Onondaga Co.; Fred. Hyde, Cortland Co.; Nelson Nivison, Burdett, Schuyler Co.; Jno. Ferguson, Davenport, Delaware Co.; C. C. Covel, Stamford, Del. Co.; S. Barrett, Lo Roy, Greene Co.; C. Pierce, St. Lawrence Co.; Wm. H. Fish, Schuyler Co.; J. K. Leaning, Fly Creek, Otsego; Chas. F. Taylor, New York; Joseph Bates, Lebanon Springs; J. J. Buckbee, Montgomery Co.; Jas. Whitford, Madison Co.; Howard Townsend, Albany; H. S. Crandall, Alleghany Co.; Cyrus Ramsay, New York; C. V. Barnett, Greene Co.; G. Z. Cole, St. Lawrence; B. D. Carpenter, Long Island; S. T. Hubbard, New York; Hiram McNutt, Warren Co.; R. Blawis, Wash. Co.; Wm. Oakes, Madison Co.; Wm. Stewart, Otsego Co.; Jno. Flint, Washington Co.; A. B. Case, Steuben Co.; J. N. Northrop, Albany; A. Willard, Chenango Co.; W. H. Bailey, Albany; Chas. A. Lee, Peekskill; P. Stewart, Peekskill; W. Van Steinberg, Cohoes; G. Botsford, Greene Co.; P. Van Dyck, Oswego; J. V. P. Quackenbush, Albany; E. W. Carmichael, Rensselaer Co.; J. H. Douglas, Utica; D. G. Thomas, Utica; E. M. Bostwick, Columbia Co.; Thos. C. Brinsmade, Troy; Wm. P. Seymour, Troy; S. S. Cartwright, Delaware Co.; S. O. Vanderpoel, Albany; P. V. N. Morris, Washington Co.; S. G. Wolcott, of Utica; Griffin Sweet, Herkimer Co.; Wm. Govan, Rockland Co.; Jno. G. Adams, New York; G. J. Fisher, Sing Sing; J. Fowler, Geneva; H. M. Knight, Connecticut; J. M. Minor, Brooklyn; Jno. W. Greene, New York; Jacob Hunt, Utica; Jno. Swinburne, Albany; E. R. Squibb, Brooklyn; DeWitt C. Enos, do.; A. K. Gardner, New York; L. F. Pelton, Westchester Co.; Freeman Tourtelot, Saratoga Co.; Alden March, Albany; P. McNaughton, Albany; L. J. Tefft, Onondaga Co.; H. K. Willard, Catskill; J. P. Whitbeck, West Troy; John R. Gregory, Troy; U. G. Bigelow, Albany; Mason F. Cogswell, Albany; Henry C. Gray, Washington Co.; A. D. Hulf, Rensselaer Co.; H. A. Carmington, Rensselaer Co.; L. Moore, Albany; John B. McEwen, New York; J. H. Wheeler, Greene Co.; L. G. Warren, Albany; L. A. Sayre, New York; E. R. Peaslee, New York; John Ordronaux, Queens Co.; W. T. Carter, Albany; P. H. Thomas, Renssolaer Co.; E. H. Parker, Poughkeepsie.

Dr. Hun then read his Inaugural Address, as follows:

The By-Laws of the Society make it the duty of the President, at the opening of the session, to speak of the condition of the Medical Profession in the State, and to call attention to such matters as may require the action of the Society. At this time our thoughts naturally turn first of all to the War in which our people are engaged, and to its influence on our profession.—The State of New York was suddenly called on to furnish about six hundred Surgeons and Assistant-Surgeons for the volunteer regiments, and when we take into account how utterly unprepared we all were by education and experience for such service, it must be admitted that the response to the call was quite as satisfactory as could have been expected. The medical care of the camp and military hospital differs so greatly from the duties of the practitioner in civil life as to demand a special training and discipline; and yet with the versatility of talents characteristic of our countrymen the Surgeons selected have not failed in any marked degree in the beginning, and are now rapidly improving. They certainly have not failed in self-devotion or in courage, and when we read of Surgeons who a few weeks before were going on their peaceful grounds, performing their duties under heavy fire, and remaining with the wounded to share their captivity, we have good right to be proud of our brethren.

They have not been deficient in moral qualities, nor so much in professional skill, as in attention to those regulations by which the health of camps is preserved. There has been too much reliance on the medicine chest and on surgical instruments, and too little care of diet, pure air, cleanliness, and other hygienic conditions. This is the common defect of our profession, both in civil as well as in military practice, but it has been more obvious in the latter because of the larger scale on which its consequences are exhibited.

The transactions of our Society for the last few years bear witness to the interest felt by the members both in public and in private hygeia, a subject which is far from having received all the attention it merits. It is to be hoped that this movement, which has at the foundation a most important reform in medical practice, may be continued.

Our profession is now, I believe, in a more sound condition than at any previous time. The standard of education in our principal medical schools is higher, and pupils go forth much more thoroughly educated than a few years ago. The war, with all its evils, is exercising a salutary influence in the Medical profession. The examinations for admission to the medical service of the army and navy set up a high standard of excellence, and as this service presents a most desirable career for young men a strong inducement is held out to students to strive to come up to it. The benefit of these examinations is thus made to reach not only those who are successful in their application, but also all those who, though they fail, yet have tried to prepare for them. Their influence on the medical colleges is also most excellent, for students wishing to prepare for difficult examinations, will go to those colleges which afford the most instruction and not to those in which degrees are most easily obtained. They have already led to the establishment of a chain of hygienic and military surgery in some of our Colleges. This serves to illustrate the working of a principle which has been proposed as a basis of reform and improvement in our medical schools, which would consist in the separation of the duties of teaching and examination, so that students might be induced to give preference, not to those Colleges which offer diplomas on the easiest terms, but to those which afford the best opportunities for preparing for examinations.

The American Medical Association has not met for the last two years, on account of the war, and it will be a matter for consideration whether the Society will recommend that a meeting of such members as can assemble under present circumstances shall be held.

I have received from the President of the Massachusetts Medical Society a communication addressed to the State Medical Society, on the subject of "Abuses in the Ambulance Service in the U.S. Army," which I will submit to the Society. I believe, however, this subject has received the attention of the proper authorities, and that the abuses complained of have been corrected.

It only remains for me to welcome you to our city, and to thank you for the honor you have conferred in calling me to preside over your deliberations.

Drs. Blatchford, Saunders, and S. D. Willard were named as a committee on credentials.

Drs. Armsby, Deering, and Bissell were appointed a committee on the President's address.

Drs. Cobb and Potter were appointed as a committee to invite medical members of the Legislature to a seat.

Dr. L. A. Smith, a delegate from the New Jersey State Medical Society, was introduced, and was warmly received.

Dr. Hunt, of Hartford, and Dr. Beckwith, delegates from the State Medical Society of Connecticut, were also introduced to the Society.

The Committee on Credentials presented the names of the following gentlemen, invited to seats as Honorary Members during the sessions: Benj. D. Carpenter, of Long Island; Cyrus Ramsey, of N. Y.; William Oakes, of Madison Co., N. Y.; Hiram McNutt, Warrensburg, Warren Co.; J. J. Flint, Fort Edward, Wash. Co.; William Seward, South Worcester, Otsego Co.; A. Gow, Schuylerville, Saratoga Co.; Hiram Watkyns, Walpole, N. H.

Dr. Taylor, of the Onondaga Medical Society, presented an address delivered by Dr. Israel Parsons, President of the Onondaga Society, before said Society at its annual meeting, on the subject of "Diphtheria." Referred to Publication Committee. Dr. Guido Furman, of N. Y., presented several communications from the New York County Medical Society, consisting of a "Report of the Meteorological Committee of the Society;" also a report of "Case of Procidentia Uteri, of fifteen years' duration, with extreme ulceration of the neck," by Dr. Isaac E. Taylor. Referred to Publication Committee.

Dr. B. P. Staats, Chairman of the Board of Censors of the Eastern District, reported that they had examined and recommended to the President of their Society, for diplomas, the gentlemen whose names follow: J. Dufendorf, Montgomery Co.; Louis Applegate, Herkimer Co.; Wm. W. Squire, W. T. Calland, G. A. Chosley, John H. Burland, and Joseph Leman, of Montreal, Canada. Dr. Joel Foster, Chairman of the Board of Censors of the Southern District, reported that they had examined and recommended to the President of the Society for diploma, Dr. Coles.

Dr. Blatchford announced the death of Zenas Cary, a delegate to the Society, and Dr. B. was directed to prepare an obituary notice for publication in the Transactions. Dr. Joseph Bates announced the Death of Dr. Robert G. Tracy, of Hudson, Columbia County, and was requested to prepare an obituary notice for publication in the Transactions. Dr. Raphael announced the the death of Dr. John C. Cheesman, and was requested to prepare an obituary notice for publication in the Transactions. The death of Dr. John T. Sheldon, a former delegate, was announced, and Dr. Ondinot was announced to prepare an obituary.

Dr. Cyrus Ramsey, Registrar of Records and Statistics, city of New York, presented a paper on the statistics of some of the diseases of New York and London.

Dr. Henry S. Downs, of New York, read a paper entitled "Post-Pharyngeal Abscess." Dr. Thomas C. Finnell presented a Pathological specimen, and made some remarks. Dr. Julius Auerback read a paper entitled "De Lunatico Inquirendo."

The President announced the following Committee on Nominations: 1st district, Oliver White; 2d district, P. Stewart; 3d district, Thomas W. Blatchford; 4th district, James Ferguson; 5th district, N. H. Deering; 6th district, C. M. Crandall; 7th district, Wm. Taylor; 8th district, H. W. Dean.

Dr. Lewis A. Sayre, of New York, read a paper entitled, "A Remarkable Case of Deception." Dr. E. S. F. Arnold, of New York, presented a paper entitled, "On Medical Provision for Railroads," which was referred to the Publication Committee. Dr. S. Barrett read a paper entitled, "A Case of Delirium Tremens, treated by large doses of Digitalis." Dr. Augustus Willard presented for Dr. Baker, of Chenango, a paper entitled, "A Case of Lithotomy." Dr. Oakes presented a Pathological specimen passed from the bladder of a man in Hamilton.

AFTERNOON SESSION.

Dr. C. F. Taylor read a paper entitled "Treatment of Potts' Disease of the Spine." Dr. F. Hyde read a paper entitled "Fractures of the Cranium." Dr. B. Raphael gave a brief synopsis of a paper entitled "On the Ligation of Arteries." Dr. Charles A. Lee read a very valuable paper entitled "On Foreign Military Hospitals." Dr. George Cook read a paper entitled "A Case of Insanity." Dr. Case read a brief sketch of a case of disease of the Uterus.

SECOND DAY—FORENOON.

Dr. J. G. Adams, from the committee appointed to attend the Connecticut Medical Society, reported. Dr. Squibb reported that the United States Pharmacopœia is now complete except the preface and index. Dr. S. D. Willard presented a report from Dr. J. G. Orton on Medical and Surgical Statistics. The committee was continued another year.

Dr. Blatchford reported a case of hydrophobia. Dr. D. G. Thomas read a paper on ovarian dropsy.

Dr. Armsby announced the bequest of $500 by the late Dr. M. H. Cash.

Dr. C. A. Lee offered resolutions approving the appointment of a commissioner of lunacy, and moved a committee to confer with the legislative committee.

Dr. Corliss reported a case of enlarged liver. Dr. S. D. Willard presented papers by Dr. Gilfillan, of Brooklyn, on Tracheotomy in Diphtheria. and by Dr. Johnson on Exsection of the Ankle Joint. Dr. Willard presented an additional list of Surgeons in the Army from New York. Dr. Gardner read a paper on Ovariotomy. Dr. Quackenbush read a paper on Pelvic Presentation. Dr. March read a paper on the wound of Garibaldi, and presented an instrument for the removal of balls. Dr. Enos read a paper on plaster of Paris dressing in club foot.

SECOND DAY—AFTERNOON SESSION.

Dr. Saunders presented a communication from the Madison County Medical Society, being an address delivered before said Society, on Diphtheria, by Dr. Saunders.

Mr. Brinsmade, from the committee appointed to draft a Sanitary Code for the State of New York, made a partial report, and asked for further time to complete their labors.

Dr. Lee, from the committee appointed to compare the Code of Medical Ethics adopted by this Society in 1823 with that of the American Medical Association, which has also been adopted (1847), and present a revised copy to the Society at its next annual meeting, reported that they had carefully compared the two Codes above mentioned, and that they find no essential difference between them, except that, in the Code adopted by the American Medical Association, it is stated to be derogatory to the character of a physician to take out a patent for a surgical instrument. As this subject was fully discussed at the last meeting, the committee do not enter into its discussion, but present the following resolutions:

Resolved, That a committee of three be appointed by the President to bring this subject before the next meeting of the American Medical Association, with a view to the reconsideration of this article.

After a brief discussion the resolution was indefinitely postponed.

Dr. Brinsmade, from the committee appointed to report on Epidemics in the 3d Congressional district, reported that he had been unable to collect from medical gentlemen residing in the district the necessary statistics, and he, therefore, reported on the subject with reference to his own city, Troy. Referred to Pub. Com.

Dr. Sayre gave a synopsis of a report to be prepared for the Transactions on Hip Disease. Dr. Adams presented a paper prepared by Dr. T. B. Gunning on the "Treatment of Fractures of the Lower Jaw, by a new method."

The President announced the following committee on the Cash bequest: Drs. Armsby, S. D. Willard, Blatchford, Chas. A. Lee, and Govan.

Dr. Swinburne read a paper on "Exsections." Before concluding he gave way for a motion to adjourn, the conclusion of his paper being made the special order for Thursday morning.

On Wednesday evening the President, Dr. Hun, delivered an eloquent, truthful, and instructive address, a copy of which was solicited for publication in the Society's transactions.

THIRD DAY.

Dr. C. W. Crandall offered the following:—

Whereas, The present Civil War has caused the hospitals of the District of Columbia to be filled with sick and wounded soldiers from this State proportionate to the number of volunteers sent out.

And whereas, Every safeguard possible should be thrown around those who have perilled their all for us. Therefore,

Resolved, That the New York State Medical Society respectfully request of our Legislators and Executive to earnestly consider the propriety of appointing an agent to reside at Washington, who shall be a Physician and Surgeon, with clerical assistants, whose only business shall be to look after the interest and welfare of the sick and wounded of the State of New York.

The Secretary read a communication from the Medical Society of Massachusetts, upon the subject of the Ambulance Service of the United States Army, calling attention to the gross abuses existing therein, and requesting sister societies to take action in the matter.

A discussion ensued, participated in by several gentlemen who had been on different battle-fields, showing the necessity for action in the premises.

Drs. Ordronaux, Garrish, and Corliss were appointed such committee.

Dr. Armsby, from the committee appointed to report on the disposition of the legacy of $500 of the late M. H. Cash, recommended that the money be devoted to the establishment of a Prize Fund, the income thereof to be given annually, or every two years, as the "Merrit H. Cash Prize," to the author of the best original essay on such medical or surgical subject as may be designated by a committee of the Society, and that the treasurer of the Society be trustee of the fund. Dr. Armsby suggested that there be annually appropriated from the funds of the Society a sum equal to the annual income of the Cash Prize Fund, and for the same purpose. Agreed to. Drs Blatchford, Ordronaux, and Parker were appointed a committee on the Cash Prize Essay.

Dr. Lee, from the Committee on Introductory Address of the President, reported resolutions recommending the establishment of an Army Medical School by the General Government, and also requesting the American Medical Association to hold its regular annual meetings, notwithstanding the existence of the present war. The first resolution was laid on the table, and the second adopted.

The Committee on Nominations presented the following report, which was accepted, and the gentlemen named therein were elected:—

President, Daniel P. Bissell, of Utica; Vice-President, Joel Foster, of New York; Secretary, Sylvester D. Willard; Treasurer, John V. P. Quackenbush.

Committee on Publication.—Drs. Thomas Hun, Sylvester D. Willard, and Howard Townsend.

For Censors.—Southern District, Nathaniel C. Husted. Austin Flint, Benjamin Drake; Eastern District, T. C. Brinsmade, Barent P. Staats, Peter McNaughton; Middle District, Jenks S. Sprague, Charles B. Coventry, A. F. Doolittle; Western District, Alex. Thompson, H. W. Dean, Edward Hall.

Committee on Correspondence.—First District, John H. Griscom; Second Dist., John Ordroneaux; Third District, Wm. P. Seymour; Fourth Dist., Hiram Corliss; Fifth District, Luther Guiteau; Sixth Dist., John G. Orton; Seventh Dist., Lake I. Teft; Eighth Dist., James P. White.

For Election as Permanent Members.—First District, Henry T. Downs, Henry L. Bulkley; Second Dist., Lewis F. Pelton, John R. Cooper; Third Dist., Jacob Newkirk, John Swinburne; Fourth Dist., James Ferguson, Alexander Ayers; Fifth Dist., J. Rathbun, Hiram Adams: Sixth District, J. H. Chamberlayre, Wm. H. H. Parkhurst; Seventh Dist., George Cook, G. Y. Barnett; Eighth Dist., H. W. Dean, Douglas Bly.

Eligibility to Permanent Membership. — First District, Samuel L. Hubbard, Guido Furman, Lewis A. Sayre, B. W. Raphael, Julius Auerbach, John Ordronaux, J. C. Hutchinson; Second Dist., Edmund S. F. Arnold; Third Dist., U. G. Bigelow; Fourth Dist., R. Blauvis; Fifth District, Samuel G. Wolcott, Isaac H. Douglas; Sixth Dist., Wm. H. Fish, of Schuyler Co.; E. M Alba, of Alleghany Co.; Seventh Dist., J. Fowler; Eighth Dist., John Root, Solomon Barrett.

Nominated for Election as Honorary Members.—John M. Cuyler, U.S.A.; W. Braithwaite, of London; Thomas Jennings, of Nashville; Pinckney Webster Ellsworth, of

Hartford, Ct.; R. Satterlee, U.S.A.; S. W. Butler, of Philadelphia.

Nominations for Eligibility to Honorary Membership.—Dr. J. G. Beckwith, Litchfield, Ct.; Dr. E. R. Hunt, of Hartford, Ct.; Dr. Lyndon A. Smith, Newark, N. J.; Dr. Wm. W. Rutherford, Harrisburg, Pa.; Dr. Ralph Dening, Litchfield Co., Ct.; Dr. H. M. Knight, Lakeville, Ct.; Dr. Stephen Wickes, of Orange, N. J.; Dr. James Cowper, Newcastle, Del.; Dr. James Kirkrid, Philadelphia, Pa.; Dr. Charles A. Pope, St. Louis, Mo.

Delegates to American Medical Association.—Nicoll H. Dering, N. Corliss, Henry S. Downs, E R. Squibb, Thomas W. Blatchford, C. V. Barnett, H. W. Dean, T. B. Reynolds, Theo. L. Mason, S. O. Vanderpoel, Wm. Govan, Oliver White, Thos. C. Brinsmade, E. H. Parker, C. A. Dayton, D. P. Bissell, J. C. Van Hovenburg, Wm. P. Seymour, Chas. S. Wood, Thomas Hun, Sanford R. Hunt, Henry C. Gray, Joseph C. Hutchinson, N. C. Husted, N. Crispell, Charles E. Van Anden.

Delegates to the National Quarantine and Sanitary Convention.—John G. Adams, Elisha Harris, John H. Griscom, Theo. L. Mason, Thomas C. Brinsmade, Hiram Corliss, Howard Townsend, J. M. Minor, Wm. Govan, S. O. Vanderpoel.

Delegates to State Medical Society of Connecticut.—Philander Stewart, L. C. Finnell, T. C. Brinsmade.

Delegates to State Medical Society of New Jersey.—Thomas W. Blatchford, John W. Greene, Lewis A. Sayre.

Delegates to Massachusetts State Medical Society.—Isaac E. Taylor, James R. Wood, John G. Adams.

Delegates to Vermont State Medical Society.—John V. P. Quackenbush, Henry C. Gray, C. L. Mitchell.

Delegates to New Hampshire State Medical Society.—Edward H. Parker, Wm. Govan, Alfred Watkins.

Delegates to Pennsylvania State Medical Society.—Chas. A. Lee, Dr. Furman, Dr. Raphael.

The following resolution was adopted by the Committee:—

Resolved, That the Secretary of the Society be authorized to fill any vacancy that may occur in the several delegations to the State Societies.

Dr. Ordronaux, from the committee appointed to take into consideration the Ambulance service, reported that the pending action of Congress in relation to the organization of the Ambulance Corps renders all further action by the committee unnecessary; but they are of the opinion that it is in the power of the Governor, by the appointment of a local Medical Agent, or Agents, in Washington, to provide additional means of relief for our sick and wounded soldiers, while being transferred to their homes, and they accordingly recommend that the Society confer with such sister societies, in other States, as may be inclined to act in concert with it, to further this matter. The Committee recommended that Drs. Swinburne and S. D. Willard be appointed a committee to present the whole subject to the Governor. Report adopted.

The Society then adjourned.

Medical Graduates at Yale College.—The following gentlemen received the degree of M.D. at the late commencement of the Medical Department of Yale College, at New Haven:—Judson Boardman Andrews, Mechanicsville, N. Y.; Albert Gordon Browning, Woodstock; Henry Sylvester Cornwell, New London; Marcus Brutus Fisk, Stafford; Newton Bushnell Hall, Branford; Cyrus Edward Humiston, Cheshire; Charles G. G. Merrill, Newburyport, Mass.; William Chester Minor, New Haven; William Burritt North, New Britain; Charles Joseph Tennant, Franklin, N. Y.; Frank Benjamin Tuttle, Naugatuck.—*Bost. Jour.*

The Ophthalmic Congress has selected Vienna as the place of its next annual meeting, and has appointed Arlt, Blodig, Gulz, Jäger sen. and jun., and Stedwag, as committee-men.—*Brit. Journ.*

American Medical Times.

SATURDAY, FEBRUARY 14, 1863.

INCREASE OF THE ARMY MEDICAL CORPS.

The bill recently introduced into Congress to give greater effectiveness to the medical department of the army provided an increase in the force. The increase proposed was not limited to any particular branch of the medical staff, but additions were to be made alike to the regular and volunteer staff, to the inspectorial corps, and to the number of the medical cadets, storekeepers, etc. There was to be added to the present medical corps one Assistant Surgeon-General, two Medical Inspectors-General, twenty surgeons and forty assistant-surgeons to the regular army; fifty surgeons and two hundred and fifty assistant-surgeons to the volunteer army; ten medical storekeepers, and as many medical cadets as the Surgeon-General might deem necessary.

The sections of the bill making this increase in the force of the medical department were drawn in accordance with the recommendations of the Surgeon-General in his annual report. The increase of the number of surgeons and assistant-surgeons is rendered necessary to supply the hospitals with proper medical attendance. The Medical Inspecting Corps is pronounced by the Surgeon-General to have been productive of excellent results, but the number of inspectors is too limited for the work that is to be performed. The medical cadets, a most serviceable class of hospital attendants and storekeepers, are altogether too few for the service. The necessity of an increase in the medical force will be seen from the following statement of the aggregate of patients and surgeons:—

The number of patients now under the exclusive care of the medical department of the United States cannot be less than one hundred thousand.

According to the Army Register of August, 1862, the following is the surgical force of the army:

Surgeon-General, with the rank of brigadier-general	1
Assistant Surgeon-General, with the rank of colonel	1
Medical Inspector-General, with the rank of colonel	1
Medical Inspectors, with the rank of lieutenant-colonel	8
Surgeons, with the rank of major	49
Assistant-Surgeons, with the rank of captain	14
Assistant-Surgeons, with the rank of first lieutenant	98
Surgeons of Volunteers, with the rank of major	158
Total	330

If to the above are added three regimental surgeons to each regiment of three years' volunteers (400 regiments), and two to each regiment of nine months' men (300), making in all 1,800 surgeons appointed by the States, the aggregate medical force engaged in the service of the United States, consists of 2,130 surgeons of all grades.

From this Exhibit it appears that there are but about 320 surgeons and assistant-surgeons available for the care of the sick in hospitals, which number seldom less than 50,000, and occasionally amount to 90,000. To meet this deficiency the Surgeon-General is obliged to employ medical men in civil practice, the number of whom is now upwards of 1,500. This class of men for the most part enter the service without previous examination, and being non-commissioned they are not as reliable as those who regularly enter the service. If the medical corps is therefore to be rendered fully equal to the service a large increase is absolutely necessary to every branch.

In advocacy of the bill Senator Pomeroy said:—

"This bill, with those already passed, only allows one Assistant Surgeon-General and three Medical Inspectors-General, and sixteen Inspectors, with the rank of lieutenant-colonel; I think we ought not to discriminate against any of these departments of the services. Formerly, in time of peace, the Medical Department expended only about $60,000 a year. We are working now under the estimate of $12,000,000 for that department, and yet we have not given them either additional clerical force, or additional pay or rank to their officers, as we have done in the other departments of the service. I think if there is any one of them that commends itself to the favorable action of Congress, it is this branch of the service. The way they were able to employ clerical help in this department is by detailing some hospital steward who gets $600 or $800 a year, to perform clerical service, for which other departments pay men $1,200, or $1,400, or $1,600 a year. They are obliged to economize in that way. Not being allowed enough assistant-surgeons in the army they have to employ citizen surgeons, not only to do clerical work, but to take care of the men in hospitals. We should do for this branch of the service what we have done for the Quartermaster's and Commissary's Departments; and it is an invidious distinction to do otherwise."

But notwithstanding the pressing needs of the service, which are recognised on the most superficial examination of the subject, and the earnest efforts of Senators Wilson and Pomeroy, the bill was so amended as to allow but a small addition to the corps of the Surgeons and Assistant-Surgeons of volunteers. Instead of meeting the questions which the measure suggests fairly and candidly, Senators played upon each other's sympathies by relating incidents of the cruelty of medical men to sick soldiers, of their incompetency, and even of their knavery. Not a surgeon was spoken of in a complimentary manner. Of the large number who have been killed while caring for the wounded on the field-of-battle, there was not a breath of praise. The narration of cases of amputation against the wish and judgment of the parties afforded more congenial topics for senatorial declamation.

THE WEEK.

The question has often been asked, what is the difference in the rate of mortality, and in the time of treatment of the wounded, whether in hospitals in distant States or in the State from which they enlist? But few opportunities have been offered to answer the query, owing to the difficulty of transporting the wounded to their own States. In certain instances the wounded have been immediately removed far northward or westward, and it has been found that they remain in hospitals a much less time than when treated in hospital near the seat of war. This question is now about to have a practical solution. The Sanitary Commission is preparing a number of Railway Hospital Cars, which are so arranged that the patient may be carried on a litter from the field or temporary hospital to the car; the litter is then suspended by slightly elastic straps, and the patient is conveyed with but the smallest degree of disturbance hundreds of miles. Each car will accommodate twenty-five or thirty patients, and contains apparatus for preparing articles of diet, a compact surgery, conveniences for the surgeon and nurses, etc. Railroad Hospital Carriages are in use in France, but they do not compare in convenience and ease with the American models which we have examined.

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The New York State Medical Society was attended last week by an unusual number of members and delegates; upwards of 120 are reported to have registered their names. A large number of instructive papers were read, occupying every moment of the session. We take great pleasure in noticing the flourishing condition of the State Society. It has the basis for one of the most important and influential Associations in this country. Much of its present activity is due to the labors of the local officers, and especially the Secretary, Dr. S. D. Willard. With great patience and self-sacrificing he has devoted his time, gratuitously, to the Society's Transactions, until they have become a most respectable volume. We hope that members in returning home will be stimulated to greater efforts in maintaining the County Societies. The State and County Societies are mutually dependent; and we may justly anticipate, that the latter will be benefited by the activity of the former.

Correspondence.

MEDICAL SOCIETY OF THE STATE OF NEW YORK.

[To the Editor of the American Medical Times.]

February 3, 1863.

Sir:—The annual meeting of the New York State Medical Society is looked upon with great interest by the members of the profession in all portions of the State. The unusually large number of delegates present in this city at this early date would seem to indicate that the interest is still unabated. The usual place of meeting is this year changed from the City Hall to the State Capitol; the sessions of the Society being held in the rooms occupied by the Court of Appeals.

The fifty-sixth aniversary was opened Tuesday morning at eleven o'clock, by Dr. Hun, of Albany, who, in assuming his duties as President, made some brief remarks relative to the effects of the war upon the medical profession of the State. It is really gratifying to see so many familiar faces year after year assembling together, most of them white-headed members of our profession, each and every one intent on presenting his contribution to science, in order that it may be of service to those who may succeed them in the healing art. Many, very many of these number thirty, forty, and even fifty years in the active labors and trials of an arduous professional career. It should make the younger members of the profession proud to hear and see the modest and unassuming manner in which they present a life-long experience to their assembled medical brethren.

It is to be regretted that the New York delegation, numbering seventeen from the County Society, six from the Academy of Medicine, and a few from the University Medical College, the College of Physicians and Surgeons, the Bellevue Hospital Medical College, and the N. Y. Medical College, is here represented by only a few members.

The delegation present so far (Feb. 3d) from New York, are Drs. T. C. Finnell, Joel Foster, James R. Wood, N. C. Huested (permanent members), Isaac E. Taylor, Oliver White, S. T. Hubbard, H. S. Downs, and Guido Furman. The proceedings of to-day were full of interest in every particular; a larger number of papers than usual were registered for reading on the chart, and many of them were fully presented to the Society.

The first paper offered was a communication from the New York County Medical Society, presented by Dr. Furman, in which the present state of the Society was fully delineated, its past history reviewed, and an earnest appeal made for its future welfare. The Meteorological Committee's report for the whole year of 1862, from Dr. J. P. Loines (chairman), was referred to the Committee on Publication. Also a paper on procidentia uteri, by Dr. Isaac E. Taylor, in which an operation was performed, resulting in a complete cure.

At this stage of the proceedings the delegation from the State Societies of New Jersey and Connecticut, namely, Drs. Lyman A. Smith and J. G. Beckwith, were invited to address the meeting, which they responded to in a cheerful manner, extending the hand of friendship and good will to the members of the New York State Medical Society, inviting them to be present and participate in their deliberations at their next annual meeting.

Dr. Auerbach, from Rockaway, Queens County, read an interesting paper directing the attention of the profession to the more careful study of the evidences of mental disorders.

Our pathological friend, Dr. Finnell, presented a beautiful specimen of hyper-ostosis of the lower extremities, occurring in an adult aged 27 years, which engaged the attention of all present by the unusual character of the deformity.

February 4, 1863.

In spite of the cold weather (the mercury having found its level at 17° below zero) the chamber was filled long before the hour of business. The interval was passed in agreeable conversation on the part of most, while the more taciturn found company in the liberal supply of newspapers furnished by the gentlemanly and efficient Secretary, Dr. S. D. Willard, of Albany. At last the session opened more brilliantly than yesterday, this morning's train having added considerable to our numbers. Among the new arrivals of to-day I perceive on the register the names of the following gentlemen from New York: Drs. E. R. Peaslee and John G. Adams (permanent members); John B. McEwen, John P. Garrish, and John W. Green, delegates. From Brooklyn: Drs. E. R. Squibb, John Ordronaux, D. C. Enos, and J. M. Minor.

Drs. Gardner, Ramsay, Raphael, and Sayre (not being delegates) were through the courtesy of the Society invited to seats during present session. The whole number present, I believe, was one hundred and twenty-three.

Dr. D. G. Thomas, from Utica, read a somewhat lengthy paper on ovarian dropsy, and related two cases which were successfully treated by removing the contents of the sac, and injecting it with iodine and iodide of potassium.

Dr. Corliss, from Washington County, related, in a very brief and humorous manner, a case of enlarged liver, the organ in question being twelve pounds in weight.

Dr. Enos, of Kings County, read an elaborate paper on club foot, in which he set forth his mode of treatment, which consists in dividing one or more tendons, and applying plaster of Paris splints. He exhibited a plaster of Paris cast and photograph of a case which was successfully treated in this manner.

Dr. Sayre related a case of exsection of the head of the femur, which had proved successful, and exhibited the portion removed.

Dr. Quackenbush, of Albany, made some very interesting and valuable remarks on pelvic presentations. This gentleman evidently possesses not only great practical knowledge of his specialty, but is withal an original thinker, and is exceedingly clear and lucid in his manner of presenting his subject.

Dr. March, of Albany, presented two instruments used for detection of leaden balls in wounds. One was a probe with a porcelain ball attached, invented by Nélaton for Garibaldi. The porcelain very readily takes on a leaden hue when brought in contact with lead.

Dr. Bly, from Rochester, as might be expected, was on hand with his anatomical legs.

Dr. Adams, from New York, presented in behalf of Dr. A. L. Sands a new splint invented by Mr. Gunning for fracture of the inferior maxilla.

Next followed Dr. Gardner, from New York, with a lengthy paper on ovariotomy, relating the history and operation of one case, which died.

Dr. Wilson, of the Chatauque Tribe of Indians, was invited to speak, and kept the audience in good humor by relating many characteristic anecdotes.

The evening brought with it the usual annual address of the President, which was listened to with deservedly marked attention. Then followed the reception at the President's house. The table was loaded with everything tempting, and it was not surprising that even physicians partook at a late hour liberally of the viands placed before them. Our friend, the professor of "brevity," was not behindhand.

February 5, 1863.

This morning Dr. Swinburne, of Albany, finished his paper on exsection, which was commenced at the previous session.

Lastly, the annual election took place, which resulted in the choice of Dr. Bissell, of Utica, for President, and Dr. Joel Foster, of New York, for Vice President, and Dr. S. D. Willard, of Albany, as Secretary.

Yours truly,

"Spiralis."

Army Medical Intelligence.

CIRCULAR TO MEDICAL DIRECTORS.

Surgeon-General's Office,
Washington, Feb. 2, 1863.

Sir:—The Surgeon-General directs that your attention again be called to the numerous instances in which men are returned to duty in a condition still demanding treatment or proper for discharge.

This is an evil bringing opprobrium upon the Medical Department, and requires prompt redress. All medical officers in charge of hospitals under your direction will be instructed by you as to their duty in this connexion, and such steps will be taken by you as will insure the prompt return to duty of all such soldiers as may be in a fit condition, and of those only.

Very respectfully, your obedient servant,
By order of the Surgeon-General,
Jos. R. Smith,
Surgeon, U.S.A.

CIRCULAR, No. 3.

Surgeon-General's Office,
Washington City, D.C., Jan. 30, 1863.

I. In consequence of the great and improper latitude which many surgeons have allowed themselves in the administration of the Hospital Fund, the following instructions are issued defining the articles for which and for which alone the hospital fund may be expended:

The hospital fund may be expended for the purchase of—

1st. Food, solid or fluid, to be used for the diet of the sick, and not furnished by the Commissary Department or Medical Department.

2d. Articles to be used in either the preparation or serving of the food, embracing principally cooking utensils and table furniture, and not furnished by the Quartermaster's Department or Medical Department.

3d. Gas, oil, and other means of illumination, to be bought instead of candles, which are part of the soldier's rations.

Experiment has been carefully and thoroughly made in a number of our best regulated hospitals as to the capacity of the hospital fund to support a proper diet table for the sick.

Reports from these hospitals are unanimous in the testimony that the cost of supplying such a diet exceeds the value of the hospital ration, and hence all expenditures for objects of less importance than a liberal diet are acts of injustice to the sick soldier.

II. Upon the receipt of this circular, a return will be made to this Office, by Surgeons in charge of hospitals, of all articles of a nature not immediately perishable which have been purchased from the hospital fund, and which are now in use in the hospitals under their charge.

This return will be made in a form similar to the returns of hospital furniture now required, and will be made hereafter quarterly, upon the last day of March, June, September, and December.

Medical officers will be required to account strictly to this Department for all such articles as may be purchased from the hospital fund.

The accompanying circular, received from the Commissary General of Subsistence, is furnished for the information and guidance of Medical officers.

W. A. Hammond,
Surgeon-General.

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ARMY MEDICAL SOCIETY AT LOUISVILLE, KY.

At a meeting of the medical officers connected with the United States Army in and about Louisville, Ky., at the Sanitary rooms on Walnut street, on Thursday evening, the 13th Nov., a society was organized for the purpose of improving the opportunities afforded them for the investigation and treatment of those diseases and injuries that have fallen under their observation in the army and hospitals during the last year. The following gentlemen were duly elected officers of the society: Dr. Wm. W. Strew, *President*, Dr. Wm. W. Goldsmith, *Vice President*, Dr. J. A. Dougherty, *Secretary*, and Dr. M. Goldsmith, *Treasurer*. The order of business is as follows: Reports of Committees; Reading of Essays; Reports of Cases; Miscellaneous business, etc.

The society is composed of the surgeons and assistant-surgeons connected with twenty-one hospitals, which contain an aggregate of about three thousand patients. A great many cases, some of considerable interest, are reported; some essays read, and a number of morbid specimens exhibited. The disease for special investigation for November was diarrhœa, that for December pneumonia, and for the present month typhoid fever, as they occur in the Army of the West.

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ORDERS, CHANGES, &c.

So much of Special Orders No. 251, A.G.O., series of 1862, as mustered Assistant Surgeon W. F. Swalm, 84th New York Vols., out of service, has been amended so as to discharge him from the service as a supernumerary officer, to date November 15, 1862.

Surgeon C. H. Laub, U.S.A., has relieved Surgeon H. R. Wirtz, U.S.A., as Medical Director of the Army commanded by Major-General Grant.

Surgeon Wirtz has been assigned to duty as Medical Director of Hospitals at Memphis.

Surgeon W. W. Nassan, U.S.V., has been dismissed from the service of the United States.

The following named officers have been dismissed from the service of the United States by direction of the President. See Special Orders No. 67, A.G.O., January 23, 1823.

Surgeon A. Krumsick, 3d Missouri Vols., for intemperance, neglect of duty, and absence without leave.

Surgeon J. Owen, U.S.V., for incompetency.

Surgeon J. C. Ayers, 7th Wisconsin Vols., for incompetency.

Ass't Surgeon F. O. Alleman, 9th Pennsylvania Reserves, for incompetency.

Ass't Surgeon W. B. Blakeslee, 121st Pennsylvania Vols., for incompetency.

Ass't Surgeon O. Nagel, 7th New York Vols., for incompetency.

Ass't Surgeon S. B. Valentine, 121st New York Vols., for incompetency.

Ass't Surgeon H. Wadsworth, 69th Pennsylvania Vols., for incompetency.

Ass't Surgeon O. S. Paine, 140th New York Vols, for incompetency.

Ass't Surgeon G. H. Fossard, 42d New York Vols., for incompetency.

Ass't Surgeon J. L. Adams, 5th Michigan Vols., for disobedience of orders and absence without leave.

Surgeon B. McClure, 9th Iowa Vols., and Assistant Surgeon W. L. Orr, 3d Iowa Cavalry, have been dismissed by direction of the President, without pay and allowances, for absence without leave.

The resignation of Surgeon R. H. Johnston, U.S.V., has been accepted by the President to take effect January 8, 1862.

Ass't Surgeon A. M. Clark, U.S.V., has been relieved from duty with the 4th United States Infantry, and assigned to the charge of the 5th Army Corps Hospital, Windmill Point, Va.

Surgeon T. B. Reed, U.S.V., is on duty at Baton Rouge, La, as Medical Director of General Grover's command.

Surgeon H. J. Churchman, U.S.V., has been assigned to duty at the Seminary Hospital, Fayetteville, Ark.

So much of Special Orders No. 10, current series, A.G.O., as revoked the muster into service of Assistant Surgeon E. S. Schumo, 2d New York Vols., has been rescinded, and he has been honorably discharged the service to date January 8, 1863, he having produced evidence of service to the Government, for which he received pay to include December 31, 8162.

Surgeon Charles Page, U.S.A., lately in charge of the General Hospitals at Hagerstown, Md., has relieved Surgeon Josiah Curtis, U.S.V., in charge of Convalescent Camp, Alexandria, Va.

Ass't Surgeon S. H. Orton, U.S.A., has been assigned to the charge of the General Hospital at Carrolton, La.

Ass't Surgeon F. T. Dade, U.S.V., has been placed in charge of General Hospital No. 3, Beaufort, S. C.

Surgeon E. F. Sanger, U.S.V., has been assigned to duty on the Staff of General Sherman, commanding New Orleans and its defences.

Surgeon Henry Buckmaster, U.S.V., has been assigned to duty as Medical Director, District of Kansas. Headquarters Fort Leavenworth, Kansas.

The resignation of Surgeon R. K. Browne, U.S.V., has been accepted, to take effect December 10, 1862.

Surgeon Josiah Curtis, U.S.A., has been ordered to report to the Medical Director at Philadelphia, Pa., for duty in the General Hospital at Germantown.

Surgeon Chas. McCormick, U.S.A., has been ordered to report to Surgeon R. S. Satterlee, U.S.A., at New York, for duty connected with the preparation of Medical Supplies.

Surgeon G. Grant, U.S.V., has been ordered to report for duty to the Assistant Surgeon-General at St. Louis.

Surgeon S. R. Haven, U.S.V., has been assigned to duty at Memphis, Tenn., and has tendered his resignation on account of private matters.

Medical News.

DEATH OF DRS. TUCKER AND MILLER.

The following resolutions were adopted at the last meeting of the New York Academy of Medicine.

Whereas, It has pleased God, in His wise Providence, to remove from among us our late associate, George Herriot Tucker, M.D., therefore—

Resolved, That in the decease of the late Dr. Tucker this Academy and the medical profession have lost a valued member, whose great industry and great statistical ability gave promise of abundant and important results to medical science, and whose premature loss they heartily deplore.

Resolved, That the New York Academy of Medicine offers sincerely to condole with the family of their deceased associate in their bereavement, and assure them that his memory will be cherished by them with respect and esteem.

Resolved, That a copy of these resolutions be transmitted by our secretary to the family of the deceased member.

Resolved, That the Academy have learned with regret of the loss by death of another of its Fellows, John Miller, M.D., who died on the 18th day of the last month, and that we recognise in his death a serious loss of a high-minded, honorable man, an excellent and successful practitioner of the profession which he so much loved, and in the practice of which for more than thirty-one years in this community he had secured a large and loving circle of friends and patrons, who now mourn their bereavement.

Surgeon Jacob H. Gotwald, of the *Keystone State*, met his death from the steam which escaped from the exploded chimney, as he was between decks, engaged in dressing the injuries of the wounded. His body was found in a sitting posture, his hands grasping a piece of lint which he was about to apply to one of the injured sailors. His death must have been instantaneous.

Dr. O. Heyfelder, of St. Petersburg, is preparing a new edition of his work on Resections of Joints, and solicits reports of well authenticated cases.

Dr. S. H. Hewitt, U.S.A., read a very elaborate paper on amputations before the New York Academy of Medicine at its last meeting.

Prof. Hamilton is preparing a second edition of his work on Fractures and Dislocations.

M. D. Benedict, M.D., Skaneateles, N. Y., Surgeon of the 75th N. Y. Vols., has been placed in charge of a hospital in New Orleans.

Original Lectures.

LECTURES ON MILITARY SURGERY.

DELIVERED AT THE
COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.

By WILLIAM DETMOLD, M.D.
PROFESSOR OF MILITARY SURGERY AND HYGIENE.

LECTURE VIII.

Amputations and Resections.—The Modes of Controlling Hæmorrhage.

Gentlemen :—After having in our last lecture tried to fix some of the indications for amputation, I have but little to say with regard to the operation itself. If you have assistants on whom you can rely, use no tourniquet, but have the main artery controlled by the finger of the assistant. If the subject bears the signs of enfeebled constitution, in consequence of long camp life and its rarely wanting influences, it is advisable before you proceed to amputate to raise the limb for a while, so as to let the veins empty themselves; you will save blood to the patient which would be lost in the amputated limb. Where you have a robust, vigorous man, this is not necessary; on the contrary the loss of a certain amount of blood is beneficial, and may prevent local congestion and inflammation. Be sure you give a good covering to the stump, without making the flaps either too thick or too long; if the flaps are too thick they will have to be longer in proportion, and the longer the flaps the greater is the extent of wounded surface. Do not let tendons or nerves hang out beyond the level of the wound; if it should happen, as it may occur in some flap operations, cut them off with the scissors a little below the level of the wound. Be sure you tie all bleeding vessels; secondary hæmorrhage is already sufficiently frequent in military hospitals not to increase the danger by neglect. Wait, before uniting and dressing the stump, till all oozing of blood has ceased; coagulated blood in the wound is in the way of union by first intention, which is nowhere so desirable and at the same time so difficult to obtain as in military hospitals; you are more likely to get it if you do not unite the wound till all oozing of blood has ceased, and you see nothing but transparent and slightly bloody serum ooze out. There is not the slightest objection where the press of wounded is great, for instance, after a large engagement, to leave the stump open under the care of an assistant, and to attend to another case before closing the wound. As a general rule the circular method is preferable, but I should like to see the usual manner of performing it modified, so that instead of making the first circular section through the skin, and then dissecting the skin off and turning it back, to make the first section at once all round to the bone, having the parts well drawn back so as to give the stump the shape of a cone, and then make a second circular section just in front of the skin down to the bone; the wound will then represent an inverted cone. This operation is quicker done, exposes less surface, and makes a perfect stump; only be careful in adjusting the retractor that you saw off the bone at the apex of the inverted cone.

In the upper extremity, especially about the hand, cut away no part that can be preserved. In the foot it is better, I think, to perform Syme's amputation, or even supramalleolar amputation, even where a small portion of the tarsus might be preserved; these stumps heal more rapidly, and the advantages of preserving a small portion of the tarsus are amply compensated for by this.

In amputation at the knee-joint, be sure you make your flap large enough; it is very apt to be too short.

Amputation in the elbow-joint is difficult and troublesome, heals badly, and, where resection cannot be performed, I think it better to amputate in the lower third of the humerus.

Scymanowsky* has lately proposed, in exarticulation at the elbow-joint and at the knee-joint, an osteo-plastic operation, analogous to Pirogoff's at the foot; in the elbow-joint to saw off the articular surface of the humerus and olecranon, in the knee-joint of the femur and patella, and trying to get union between them. These operations are recommended with the view of preserving the insertion of the muscles respectively, the triceps and quadriceps; as their function, however, is to move the amputated part, I do not see the strength of the argument. I believe this operation has lately been performed in some of our military hospitals in exarticulation of the knee-joint, with what success I do not know. As I say, I can see no possible advantage to be gained by such a proceeding, but see clearly that the danger of protracted suppuration and pyemia from osteo-myelitis is increased.

Resection is to be performed where a portion of the bone is so splintered and comminuted that it is evident it will become necrosed during the attempt at repair, and where yet the limb below the wound may be preserved. This conservative operation, one of the triumphs of modern surgery, proves most successful in the upper extremity.

Where the head of the humerus is shattered, resect it; you may remove several inches of the shaft with it, and yet the patient may retain a useful arm. Where the glenoid cavity is fractured, you may also take it away, either by sawing off the entire glenoid cavity, or, if it is only grazed, by removing the part with the gouge. There is no necessity of always following the same method of operating; it is desirable, if it can be done, to include the gunshot canal in the incision, and be careful to save the tendon of the long head of the biceps. If the head of the bone remain in its articular connexion, the neck being broken, you cannot, of course, dislocate it by the manipulations with the shaft, as laid down in the text-books, when the operation is performed on account of disease; you have to grasp it with strong forceps and remove it.

Resection of the elbow-joint yields the most favorable results. You get easier at the joint by an H. shaped incision from behind, but take care to preserve the ulnar nerve. Partial resection of the elbow-joint should not be performed; I believe in most cases where it has been attempted amputation has become afterwards necessary. Resection of carpal and metacarpal bones should in all cases be preferred to amputation; a finger, even if deprived of its metacarpal support, is very useful. In resections about the hand, avoid as much as possible transverse incisions; make them longitudinal; even if they have to be a little longer, you save thereby the tendons, and are less liable to wound blood-vessels.

Resections in the lower extremities furnish in the aggregate such unfavorable results, that they should be attempted only in exceptional cases. All cases of resection at the hip-joint have, I believe, terminated fatally with but one or two not fully authenticated exceptions. The same holds nearly good in the knee-joint; although Medical Director Dr. McDougal stated to me yesterday that he had seen a successful case operated upon by my friend Dr. Bontecue. Resections in the foot, generally, lead to tedious and protracted suppuration with all its dangers, and frequently require amputation afterwards. Besides, a toe deprived of its metatarsal support is of very little use compared to a finger.

We have thus far spoken of resection of the epiphyses; the fact that the danger in gunshot fractures arises in a great degree from necrosis of the fractured extremities, has led to the proposition of resecting those extremities. I do not think experience has as yet furnished sufficient data to speak positively on this operation; where it has been performed in fractures of the thigh, it has, as far as I know, been unsuccessful.

We come now to an occurrence the frequency of which gives an additional element of danger to gunshot wounds, I allude to secondary hæmorrhage. That secondary hæmorrhage is comparatively very frequent in gunshot wounds is uncontested, but the why is not clear. In many cases it occurs from vessels which had been severed by the ball, and did not bleed in the beginning, then it is not properly speaking a secondary, but a primary hæmorrhage; in other cases it occurs where the vessel probably has not been severed, but only grazed, and its coats bruised by the ball, and is opened in the process of suppuration; in very many cases, however, it occurs so much higher up than the original wound, that such a presumption is inadmissible, and we must explain it by a process in the artery, analogous to what takes place in the bone, when we see it becomes necrosed high up.

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* Prager Vierteljahrsschrift f. d. pract. Heilk. The same author has published a work on Plaster of Paris dressing in Military Surgery. St. Petersburg, 1857.

We may sum up our means for arresting secondary hæmorrhage under four heads. 1st. Pressure; 2d. Ligature of the bleeding vessel in the wound; 3d. Ligature of the trunk of the vessel about the wound; and 4th. Amputation.

1st. The first, that is, pressure direct upon the wound and bleeding vessel, I think, should always be attempted first where the locality admits of it, and every experienced surgeon will have seen many cases of alarming secondary hæmorrhage arrested by this means, where the bleeding has not returned, and the patient got well. The disadvantages are the uncertainty, and the constantly impending danger of recurrence of the hæmorrhage; besides, large quantities of blood are thrown into the intermuscular spaces, leading to extensive suppurations with sphacelus of the cellular tissue dissecting the muscles clean to a considerable extent.

2d. The ligature of the artery in the wound above and below the bleeding orifice. This is much easier said than done, and in most cases where I have seen the attempt made, the surgeon has worked his way far up and beyond, and been glad to find the artery eventually high up, which he might have done much easier, and with much less wounding of parts, by making at once an incision above. The finding and tying the lower end of the bleeding vessel was, of course, not thought of again. Now, although this is the method most recommended in text-books, the difficulty of carrying it out would lead me to condemn it in most cases; besides, even if carried out successfully, it gives no absolute security where the vessel has been opened in consequence of that peculiar destructive inflammation of its walls, because in that case the ligature is applied to a diseased vessel, and will cut through before the obstruction of the lumen is accomplished, and the hæmorrhage will return.

3d. The ligature of the trunk of the artery. This will not always arrest the bleeding, and is apt, especially in the lower extremity, to be followed by gangrene.

* * *

M. Burggraeve has put into practice the theory of M. Polli—the employment of the sulphites in supposed cases of morbid ferments in the blood. The iatro-chemists, therefore, are still alive, notwithstanding Dr. Chambers's objections to them. M. Burggraeve has communicated to the Belgian Academy of Medicine his experience in the use of these agents in cases of wounds, abscesses, and burns. The sulphite of magnesia is administered internally—one *gramme* (fifteen grains), in a glass of sugared water, four or six times a day. The sulphite of soda is employed externally, in lotions, etc. It produces, we are told, immediate local anæsthesia, which is particularly appreciated in burns, and allows of their being dressed and cauterised without pain. In sixty-five cases of wounds thus treated, the effects produced were immediate; the wounds improved, and became of a healthy color; active granulation took place; the pus was scanty, inodorous, and tough as gluten. The application thus also acted as a disinfectant.—*Brit. Jour.*

Guerin claims priority of invention of the style forwarded to Italy by Nélaton for the purpose of detecting the presence of the ball in Garibaldi's wound.

Original Communications.

CASE OF MAJOR-GENERAL RICHARDSON, U.S.A.

By B. HOWARD,

ASST.-SURGEON U.S.A.

I have been requested to furnish a report of the case of the late Major-General Richardson, on account of its personal as well as its medical interest.

On the morning of the 18th of September I received instructions from the Medical Director of the Army of the Potomac to visit the General, whom I found in a farmhouse on the field of Antietam. From the General's Chief of Staff I learned that the General was forty-three years of age, was usually of very robust health, but for several weeks had been in a weak condition from chronic diarrhœa; that on the previous day he was wounded in the shoulder while in advance of his attacking column on foot, supposed to have been struck by a fragment of a shell, which was seen to burst above him. After receiving the wound he walked about ten minutes, and was then taken in an ambulance to the house where I found him the next morning.

Sept. 18th, 8 A.M.—Pulse 125, feeble and slightly intermittent; face rather livid, anxious expression, nostrils dilated, cold clammy sweat on forehead; posture semi-recumbent, with inclination towards wounded side. Patient complained of acute pain at each inspiration about fourth and fifth ribs on left side, "as if stuck by a knife;" wanted the windows kept constantly open, and seemed to be apprehensive of suffocation whenever his attendant ceased fanning him. He implored me to give him something to stop a hiccough, which was so very violent that he said it was killing him.

The wound, which had the usual appearance of the wound of entrance of an ordinary gunshot wound, was immediately inferior and to the right of the left coracoid process. On introducing the little finger it passed over the inner aspect of the capsular ligament of the shoulder-joint, which was intact, across the course of the axillary artery, which pulsated plainly beneath the finger, proceeding downwards and inwards, so that a foreign body continuing in motion at that angle would impinge on or about the fourth or fifth rib anterior to its angle. The motion of the right side of chest was much greater than the left. Percussion yielded nothing abnormal, but over almost the entire external half of the left lung there was a fine crepitant rhonchus most marked near angles of fourth and fifth ribs and at base of left scapula, with slight friction sound about angle of fifth rib. On being pressed to state my opinion I said I thought there were about 95 per cent. chances of a fatal termination; that it might occur within a few days or at a more distant period. This opinion was fully concurred in by my friend, Dr. Gouley, U.S.A., who, happening to call at the time, kindly examined the case with me. The first consideration being evidently to rally the patient, and control the alarming singultus, brandy and water was ordered a teaspoonful every half hour, quin. sulph. gr. iij. every two hours, and morph. sulph. one-eighth gr. every two hours. Sinapism from præcordia to seat of pleuritic pain.

8 P.M.—Pulse 126, weak, and intermitting; singultus slightly diminished. Made further examination of wound with gum elastic bougie; it passed six inches in same direction as the finger and silver probe in the morning, but I could not succeed in engaging the point, or discovering any opening into cavity of the chest. Crepitant rhonchus of the morning increased, with fine metallic tinkling occasionally audible near angle of fourth rib; at base of left scapula is bronchial respiration; ordered continuation of sinapism, etc., as before, with Hoffman's anodyne, five drops

to be taken alternately with one-eighth gr. sulph. morph. every hour. 19th.—Pulse 146, character as before; surface warmer; hiccough rarely occurs except after taking something into stomach or changing position; patient says he feels much better. 6 P.M.—Pulse 138; feels comfortably; hiccough continues to diminish; respiration less labored; previous abnormal sounds on auscultation increasing; beef-tea is taken freely; bowels being distended with gas, ordered enema of turpentine and castor oil, with continuation of previous treatment. 20th, 8 A.M.—Pulse 138; tendency to return of hiccough; sleeps better; metallic tinkling and sharp dry crackling crepitus ceased; is succeeded by a general liquid purling râle or moist rhonchus; surface quite warm; face flushed; treatment directed chiefly to maintenance of vital powers; stimulants and beef-tea are taken in oft repeated but small doses; singultus, which is again racking patient, to be treated as before; the wound has simple tepid water dressing. 21st.—Resigned charge of patient to Surg. Taylor, U.S. Vols., intending to call as requested as often as other duties might permit. Pulse 128; respiration easier; from fourth rib downwards percussion on the affected side yields dulness, and auscultation a perfect blank; above this point to clavicle anteriorly there is a muffled respiratory murmur with crepitus; at base of left scapula is a remarkably fine plashing sound on succussion, with œgophony; right lung perfectly healthy; apex of heart is scarcely perceptible, and is shifted upwards and to right side; paracentesis thoracis was proposed, but objected to by patient's friends; an enema was followed by an enormous amount of offensive fæces, giving great relief, and diminishing tendency to singultus. 22d.—Pulse 130, dulness over entire left lung; auscultation discovers perfect blank, except slight crepitus at base of lung; the patient's breath has that fœtid odor usually associated with wound of the lung. 24th.—Pulse 120; dulness still complete over middle lobe; returning respiratory murmur, with crepitus at apex and base; bronchial respiration at base of scapula and for a short distance below. 26th.—Clear metallic tinkling near sternal end of fourth and fifth ribs; has slight cough; expectorates small quantity streaked rusty sputa; treatment as before, with addition of stimulant expectorants. 28th.—Pulse 122; respiratory murmur improving at base of scapula and in sub-clavicular region; inequality of motion of the two sides of chest continues; cough diminished; sputa lost its rusty appearance; bowels regular; appetite natural. 30th.—Pulse 116; cough and sputa diminishing daily, latter white and frothy; respiration at base of scapula and below for some distance still improving; anteriorly, dulness is increasing, accompanied by great diffusion of cardiac sounds.

Oct. 2d.—Pulse 120; from sterno-costal articulation of fourth to same point of eighth rib is heard a very loud rhonchus, sounding as if a cork were being forcibly drawn from a bottle; it communicates a distant thrill to finger placed over the part. The patient, who had heard no reference to it, inquired what it meant, and on being asked, he said he really could not tell whether he felt it or heard it most distinctly. 4th.—Pulse 122; since hiccough ceased, patient has continued to feel quite comfortably, except when the attendant stops fanning him; although his general appearance is improved, he seems depressed. 8th.—Pulse 132; skin hot and dry; patient wears an unfavorable expression; sound anteriorly over the entire left lung much clearer than over the right in recumbent posture; motion of heart very tumultuous, but communicates little impulse; valvular sounds inaudible; amphoric resonance very marked at sterno-clavicular articulation of fourth rib; near same part of eighth is clear metallic tinkling; discharge from the wound as from commencement continues to be inappreciable; tonics and nutritious diet continued in same manner. 10th.—Pulse 132; expression worse; amphoric resonance diminished; metallic tinkling as before, but plainest at seventh rib near sacrum; appetite diminished. 12th.—Pulse 134; face has livid appearance; features appear contracted; patient has bad earthy odor; pulmonary symptoms not materially changed. 16th.—Pulse 134; peculiar clicking sound between fifth and sixth ribs, about three inches to left of sternum; from peculiar fremitus accompanying it, and felt by the finger at this point, it would seem to be due to the tension and recoil of a fibro-plastic bridle, one end of which is attached to the pleura costalis and the other to the pleura pulmonalis. The plashing sound is so distinct as to be audible to the patient, who on being raised, said, "There, doctor, don't you hear it? there it goes." During past four days Dr. Taylor informs me there has been a typhoid tendency, with brown tongue, and a good deal of diarrhœa. Appetite still diminishing; takes nothing but fluids. Eating, drinking, or sitting up in bed immediately produced hiccough, which, however, subsided much more readily than formerly. 20th.—Pulse 120, and small; no change of importance since last visit. 27th.—Pulse 120, and weaker; expression very bad; since last visit typhoid symptoms have continued; tongue dry and red; it has been brown, I am told, accompanied with sordes; diarrhœa has occasionally been profusely colliquative; pulmonary symptoms unchanged; wound is quite healed. Patient talks much about going home, but is otherwise listless.

Having received an order to report at a distance as Acting Medical Purveyor of the Army of the Potomac, I left with the sad conviction that I should never look upon the gallant hero again. I was afterwards informed that he died on the 3d of November. I recently met Dr. Taylor, who says that from the time of my last visit typhoid symptoms increased, accompanied by involuntary discharges, ending in a comatose condition and death.

The *post-mortem* was made by Dr. Taylor, but was necessarily very incomplete for private reasons. He says he found no opening into the pleural cavity, that it contained about two ounces each of pus and serum, with a little blood. The lung was thoroughly compressed against the upper and posterior wall of the cavity. Plastic lymph in thick layers was found upon the pleura costalis and pulmonalis, strong bridles being formed in some places. The missile was not found, but the doctor thinks it might have been discovered near the base of left scapula, as there was a tendency to pointing there.

What relation did the pleuro-pneumonia bear to the wound? Was it a consequent or a coincident? Upon this question depended the difference of opinion which arose in the case. On one side the diagnosis was: simple flesh wound of the shoulder, with concurrent idiopathic pleuro-pneumonia, caused by exposure of the corresponding part of the General's person, when after the heat of battle it was stripped for the examination of the wound. The absence of the usual cough and bloody sputa was considered as negative evidence against the implication of the lung with the wound in question. This of course allowed of a favorable prognosis from the first. On the other side there were the shock and continued depression of the vital powers, instead of the usual inflammatory excitement incident to the first stage of an attack of idiopathic pleuro-pneumonia; the fact that the track of the missile, as far as it could be traced, was in a direction which if continued a little further would bring the point of the bougie in contact with the pleura at or about the fifth or sixth intercostal space; the occurrence in their proper order of succession of all the usual symptoms of gunshot wound of the lung, except the cough and bloody sputa (which, though usual, are not constant accompaniments) commencing immediately after the receipt of the wound, the morbid signs taking their point of origin and distribution just where the missile would have impinged had its course been continued in the direction of its ascertained track.

Upon this presumptive evidence I based my diagnosis at the outset, which was that the missile had wounded the pleura costalis, perhaps had lodged in an intercostal space and contused the lung without rupturing the pulmonary substance, thus setting up pleuro-pneumonia at this point without giving any occasion for bloody sputa; or, that the missile might have entered the pleural cavity with or without producing laceration of pulmonary tissue, have fallen upon the diaphragm, and by its presence there and its motion upon the altered plane of the diaphragm, have given rise to the racking singultus which followed every change of position, especially leaning forward. The probability of such a missile as a jagged piece of iron being lodged in the walls or in the cavity of the chest was such an additional reason for an unfavorable prognosis that I could never allow myself to hope much from any apparent temporary improvement.

The pneumo-thorax could not have resulted from such an attack of idiopathic pleuro-pneumonia, where there had been no disintegration of lung tissue, the expectoration being less than in an ordinary case of bronchitis. Both it and the other fact that the extensive sloughing and suppurating track of the wound discharged nothing appreciable at the surface, would be at once explained supposing the wound to have communicated with the pleural cavity.

On the 16th October, in answer to a telegram from Gen. McClellan, I replied through Gen. Porter as after my first visit, that I did not think Gen. Richardson would recover, stating frankly the opposite opinion held on the subject.

Meeting Dr. G. Buck and my friend Dr. Agnew on the field I described the case to them, and found they endorsed both my diagnosis and prognosis. My friend Dr. Gouley, U.S.A., visited the patient with me again on the 20th of October, and fully concurred with me as before.

If, as the post-mortem would appear to show, the missile did not enter the pleural cavity, nor produce any lesion of the pleura costalis, this case furnishes a very rare and curious instance of concurrent disease. If the evidence of this, however, had been rendered positive by the actual discovery of the missile at some other point, the autopsy would have been much more valuable.

So much time having elapsed as to allow the entire track of the wound to heal, reparative changes may have occurred in the pleura, making it very probable that the seat of an old perforation would be overlooked in a cursory examination, when surrounded by so many marks of recent inflammation.

Camp near Falmouth, Va., Jan. 29, 1863.

EXPERIENCES IN MILITARY SURGERY.

By DAVID P. SMITH, M.D.,

SURGEON VOLS., SURGEON IN CHARGE OF FAIRFAX SEMINARY HOSPITAL.

SYME'S AMPUTATION AT THE ANKLE-JOINT.—NEW METHOD OF AMPUTATION OF THE LEG.

I have long had it in contemplation to make public my experience thus far in the war, and I now proceed to present to the profession my views upon the *Art of Surgery*. Probably in no vocation are theory and practice so widely dissevered, for the simple reason that a few cases, peculiar it may be in their character, are taken by many as the starting-point for general conclusions. Perhaps long continued and arduous service with the wounded on the bloody fields of Mill-Springs, Pittsburgh Landing, and Corinth, and with the wretched, torn, and maimed of the second Bull Run battle, may serve as an excuse for stating the conclusions forced upon me.

The destructive powers of modern missiles have more than kept pace with the triumphs of conservative surgery, so that now as formerly amputations and resections must frequently be resorted to. These operations in civil life, however bunglingly performed, will in most cases succeed, because all that is needed in the after care of the patients is at hand. The nervous exhaustion, almost universally present after a hard fought battle, is not found in civil life. We must, therefore, endeavor to reduce to a minimum the drain upon and shock to the nervous system of those undergoing severe operations.

SPECIAL AMPUTATIONS.

1st. *Syme's Amputation at the Ankle-Joint.*—I had no experience in this operation at Mill-Springs and Pittsburgh Landing, because the cold and wet reduced the vital powers of the wounded to such an extent that I could perform no amputation below the middle of the leg. After the second Bull Run battle, however, it was done in this hospital—Fairfax Seminary, Va.—four times. One recovered with an admirable stump, one died from pyæmia, and two, on account of sloughing of the flap, were obliged to submit to amputation of the leg.

The operation should not be blamed for the sloughing. The operations being all secondary, much suppuration had entirely undermined the tissues composing the posterior flaps, and reduced their vitality to a very low ebb.

In most cases of this operation, especially when the heel flap is at all inflamed, I should carry the posterior incision just over the point of the heel, and saw the bones one inch above the highest point of the articular surface. This operation I practised frequently on the cadaver in Paris some time ago, and the above measurements give a well formed stump. To perform this operation handsomely a very sharp knife is needed, with a broad blade, and care should be taken to divide the lateral ligaments immediately after the first incisions.

Amputation of the Leg.—The multitude of amputations below the knee which I have performed, seen, and watched the result of, have convinced me that none of the ordinary methods are the best possible in any case, least of all in army surgery. I have yet to see the circular operation heal without great suppuration; and the posterior flap operation has, in five cases out of six, been complicated with the protrusion of the spine of the tibia. This with a heavy posterior flap can scarcely be prevented. The double flap is nearer the truth, but the, in my estimation, proper operation differs widely from that. It is briefly described thus:

Standing on either side, transfix the limb at the point you intend to saw the bones with the flat of the knife against the posterior surface of both tibia and fibula; then cut downwards for about five inches, keeping the knife closely applied to the surface of the bones. Next bring the back of the knife to its first position pressing back against the commencement of the incision. Then with a quick movement of the wrist cut a posterior flap of one or two inches in length, and carrying the disengaged knife over the front of the limb connect the extremities of the longitudinal incision by a curved incision with its convexity downwards. Dissecting up the anterior flap the operation is easily completed, and, remembering to saw off the upper and inner angle of the shin, your anterior flap falls over the stump as naturally as the eyelid over the eye, and the pus finds as ready an exit as do the tears.

The advantages of this mode of amputation are many and various:—

1st. The facility of execution.

2d. The complete freedom from all and any tension.

3d. The ready exit of pus.

4th. The impossibility of any dragging of the flap against the spine of the tibia.

5th. The freedom from pressure of all the important vessels and nerves.

The only objection that can be urged against this method is this: that by making the anterior flap so long more of the length of a limb may be sacrificed. This objection at once falls to the ground, when we reflect that the posterior flap may be increased in length, and the anterior shortened, whenever circumstances may seem to demand it. The peculiar advantages of this form of operation are well preserved if the anterior flap is not more than two inches longer than the posterior.

I take much pleasure in submitting this operation to the notice of the profession, because I adopted it after long trial upon the cadaver in Edinburgh and Paris, previous to the breaking out of this rebellion, and have since then become thoroughly convinced of its superiority. I first conceived this operation while endeavoring to simplify Teale's method.

SPLITTING OF BULLETS AGAINST BONE.

By H. P. STEARNS, M.D.,

SURGEON-IN-CHIEF OF GENERAL HOSPITALS, 4TH DIVISION, ARMY OF MISS.

While inspecting one of my hospitals recently, the surgeon-in-charge drew my attention to a patient whose arm had been wounded at the battle of Corinth, Miss., about the 1st of October. The ball had entered about two and a half inches above the elbow, and was supposed by the patient to have been removed immediately afterwards by the surgeon examining the wound. The probe detected what I judged to be the ball, or a partially detached portion of bone. I enlarged the wound, which had nearly closed, and introducing a strong pair of forceps, and using considerable force, removed a portion of a Minié ball which had penetrated the bone. Afterwards three other smaller pieces of the ball were removed, without force, but I found no pieces of detached bone.

These four pieces altogether weighed less than half an ordinary Minié ball, showing that there must have been at least *one* other piece. I presume this was removed by the surgeon who first examined the case.

What is still more remarkable in this case, the humerus was not fractured. The ball had been driven against and into the bone with sufficient force to divide it into five parts, and four of these parts had remained imbedded in the bone during about nine weeks. There is still to be seen texture of bone in the folds of two pieces of the ball. I could distinctly trace with my finger the outlines of the opening in the bone where these parts had remained; still the shaft of the bone suffered no longitudinal or transverse fracture.

During my experience in this war I have seen many cases where the ball was divided into two parts. The bone in all of these cases was fractured.

After the battle of Donelson, last winter, I amputated a thigh in which I afterwards found the ball among the fragments of bone, divided into three pieces. In this case also the shaft of the femur was extensively fractured.

Reports of Hospitals.

BELLEVUE HOSPITAL.

CASES OF RECOVERY FROM INCISED WOUNDS OF THE ABDOMINAL WALLS INVOLVING THE PERITONEUM.

[Reported by H. Raphael, M.D., House Surgeon.]

Injury of the abdomen with wound of the peritoneum is always of grave character, from the liability of the supervention of peritonitis, not circumscribed inflammation around the wound, which is essential for the healing process, but general inflammation of the peritoneum. From the important organs it protects, the extensive surface this membrane covers, and the liability for the inflammation to extend by the continuity of the membrane and the contiguity of the surfaces of the abdominal organs, the prevention of this inflammation excites the surgeon's desire. With this view the treatment adopted generally is both vigorous and early in order to check, if the total prevention of peritonitis is impossible. The treatment consists in simply keeping the abdominal organs in a state of quiescence or absolute rest, in fact so completely overcoming their muscular action by sedatives and narcotics that they become paralysed and refuse to act. For such purposes opium is now recognised as the most potent remedy, and such an amount is given as will at once arrest the vermicular action of the bowels, and keep them in a state of confinement. In some cases two grains of solid opium, or half a grain of morphine followed up every hour by half the quantity, will be found to be sufficient; in others, however, the dose must be still larger in order to produce its full effects, as much as four grains of opium given at once, and this followed up every hour by smaller doses. Those cases wherein large doses of opium are required to produce its full effects are generally those who have led an intemperate life. Their tolerance for this drug is remarkable: the dose that would be sufficient for an ordinary person to produce its full effects will hardly be perceptible in those of intemperate habits. And the still greater tolerance for this drug in traumatic or idiopathic peritonitis and puerperal peritonitis is remarkable. Instances where patients take a quarter or half a grain of morphine every hour daily for several days in succession are not infrequent. And although these patients received the insignificant amount of four grains in the first case and eight grains of opium in the second case, they both recovered without any untoward symptom.

Case I.—Thomas C., æt. 20, Irish, by occupation a hostler, admitted August 15th, under Dr. Mott. Patient is of intemperate habits, and while under the influence of liquor had a quarrel with his neighbors. In the affray he was stabbed in the abdomen with a large cheeseknife, producing a wound two inches in length in the right lumbar region, about an inch and a half below the ribs. Originally the wound was much smaller, but had to be enlarged to reduce the protruded gut. After the hernia was reduced the edges of the wound were brought together by sutures and adhesive plaster, over which a compress was put, and an opiate administered.

Aug. 16th.—Patient seems to suffer very little pain or any unpleasant symptoms, but his pulse is 106. Ordered the opiate to be increased in quantity, and tr. aconite rad. in drop doses every hour to be given. This reduced the pulse to 80 by four P.M. The opium was given to prevent the bowels from being moved. The wound healed readily, and the patient was discharged on the 18th of September. His bowels did not move for nine days.

Case II.—John D., æt. 40, Irish, stage-driver by occupation, admitted Nov. 12th, 1862, under Dr. Stephen Smith. Patient addicted to the use of spirituous drinks, and during a quarrel was stabbed with a sharp instrument; could not say whether it was a knife or a dagger with which the injury was inflicted. The wound was situated in the hypogastric region, midway between the pubes and umbilicus, about three-quarters of an inch in length, perforating the peritoneum, through which the intestines protruded. By the time he arrived at the hospital, at seven A.M., five hours after the receipt of the injury, the gut protruded to about a foot in length, and was by that time congested. At one point it had the appearance of the external coat being nicked out to the extent of half an inch. The protruded portion was, in addition to being congested, filled with air and fæces, forming the body of the tumor, the neck of which was tightly constricted by the wound of the abdominal walls.

The reduction of the protruded gut was now found to be impossible without enlarging the wound, which was done to the length of two inches. The gut was now easily reduced, the wound closed without sutures and adhesive plaster, a compress placed over the wound, the patient put to bed, and a full opiate given. Pulse 23 in the quarter.

Nov. 12th, six P.M.—Patient has slept the major portion of the day, has no pain, pulse 84.

Nov. 13th.—Patient considers himself well, and thinks he ought to be allowed to go home. Pulse 90. Has a short husky cough, which troubles him considerably, and the diaphragm presses the abdominal organs towards the wound.

Nov. 14th.—Complains of pain in the chest on the right side, the lower part is somewhat dull on percussion, expectorates at times pneumonic sputa, leading greatly to suspect the supervention of pneumonia.

Nov. 15th.—Patient about the same. Cough somewhat worse. The wound is doing well; has no pain whatever in belly. Pulse 70.

Nov. 16th.—Patient is better to day than he has been for the last few days. And from this day he went on improving, the cough gradually lessened, the wound closed up, and he was discharged on the twenty-eighth.

At first this patient took but four grains of opium daily, but this was increased, when the pulse was found to rise, to six and eight grains in the day. This was sufficient to cause contraction of the pupils, dulness of intellect, etc., showing that the patient was under the influence of the narcotic. His bowels were confined for twelve days, from the day previous to the receipt of the injury to the twenty-fourth, when a cathartic was administered. He was discharged on the 28th of November, 1862.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, Oct. 22, 1862.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

OVARIAN CYST.

Dr. Emmet presented the portion of an ovarian cyst which he had removed some time ago.

On the 28th of August last I was consulted in reference to the propriety of an operation for the removal of an ovarian tumor, in a case sent me by Dr. W. H. Van Buren. The patient was twenty-four years of age and married; she had had one miscarriage, and gave birth subsequently to two children without any complication; the youngest child was born six years ago. The menstrual flow appeared for the first time at the age of thirteen; it was afterwards regular and free from pain, lasting always a week. The general health from childhood had been particularly good. For nearly a year after the birth of her last child she continued to suffer from tenderness on pressure over the whole abdomen, but it was not severe enough at any time to interfere with the performance of her household duties. About four years ago she first noticed in the right iliac fossa an enlargement, which increased very slowly in size, until within the past six months. On an examination it was found that but little emaciation had yet taken place. A large cyst filled the abdominal cavity, having its origin, as it was then supposed, from a firm, globular, multilocular mass, occupying the region over the right ovary. On passing the finger into the vagina the uterus was found retroverted, neither ovary could be felt, and the tumor only detected well up in the pelvis. The abdominal parietes at any point could be caught up in a fold, and moved freely over the walls of the tumor, except over the multilocular portion. On causing the patient to make an effort (while lying on the back) to rise from her couch without the aid of the arms, the walls of the abdomen seemed to glide freely over the surface of the cyst, and on watching the act of respiration the same fact was arrived at. Under these circumstances, in connexion with the favorable state of the patient, and her great desire for the operation, ovariotomy was deemed justifiable. Early in October she made her arrangements for the operation. In the meantime, since seeing her last, she had become enormously distended and more emaciated, although still hopeful, and in good health. In this condition Drs. Van Buren and Metcalfe saw her with me in consultation, and fully concurred in the justification of an early operation. On Monday, Oct. 13, 1862, at 2 P.M., the patient having been placed under the influence of ether, with the assistance of Drs. Van Buren, Peters, and several other gentlemen, I operated by a small incision in the linea alba. After removing (with a large trocar) a portion of the fluid I endeavored to withdraw the sac, but succeeded only partially. The fluid was then nearly all drawn off, and the incision enlarged to about six inches; at first no adhesions were found, but as the hand was advanced they became both more numerous and firmer, until several bands (nearly as large as the finger) were traced up to their attachment on the surface of the liver. At this stage of the operation it was deemed too hazardous to proceed further with the separation of the sac. As the sac was drawn out for the purpose of attaching it to the abdominal incision its origin was discovered in the broad ligaments of the left ovary, while direct adhesion had taken place throughout the length of the multilocular mass which involved the opposite ovary, and both had firm pelvic adhesions. Several of the multilocular cysts were emptied through a common opening with the hope of freeing a larger portion of the main sac, but without succeeding in the object. In consequence of the pelvic adhesions this portion could not be attached to the lips of the abdominal incision; it was therefore closed with a silver ligature and left. After drawing out all the liberated portion of the large sac a series of link stitches, formed of interrupted silver sutures, was taken across the portion of the sac presenting at the outlet. These sutures were passed about two inches apart, and twisted separately; but by being introduced behind the preceding one each loop included its fellow on each side, and, strangulating every portion, effectually guarded against hæmorrhage. The portion of the sac external was then cut off close to the suture line. The abdominal wound was closed by a number of deep interrupted silver sutures passed through the lip, sac, and opposite lip; by this means the sac was included between the edges throughout the entire length of the wound. The portion of the cyst left behind was that extending from the broad ligament on the left side to the liver, and was adherent along its course to the multilocular mass involving the right ovary. At every point where the bands had been broken down slight oozing of blood took place, until after the sac was strangulated; but at the time of closing the external opening this had ceased. By measurement it was found that this sac had contained nearly *eight gallons* of fluid. At half-past four P.M. reaction had taken place, with a pulse of 104. An enema of beef-tea and acet. opii gtts. xx. was then ordered, but within a short time afterwards vomiting occurred, and was followed by a persistent nausea up to the time of death. On inquiry from her friends it was ascertained that from an idiosyncrasy opium could not be tolerated in any form, thus seriously complicating the case. I was not able to administer by the rectum more than fifteen drops of acet. opii every two hours, without producing violent vomiting and partial syncope. Twenty-four hours after the operation the pulse had reached 134 per minute, and was never subsequently below that point. She continued to a great extent free from pain except over the multilocular tumor. At 7 A.M., on Wednesday, she had a slight rigor, with a pulse of 160; there was no tympanitis, and but little pain on pressure. The bladder had been emptied by means of a catheter every six hours, drawing off each time between eight and ten oz. of urine. On passing the catheter at 10 P.M., Wednesday, with a pulse at 148, the quantity of urine secreted was found to have been diminished to three oz. in six hours. She now began to sink, and the heart's action became too feeble to be detected at the wrist. With a constant nausea she sank, becoming gradually both blind and deaf, and died on Thursday, at 3 P.M., seventy-two hours after the operation. A post-mortem examination could not be obtained. The case is an interesting one in a diagnostic point, as all the rational symptoms presented seemed to indicate an absence of adhesions, from the fact that the bands in front were of a sufficient length to allow the abdominal parietes to glide freely over the surface of the sac.

Dr. Sands did not think that adhesions of these cysts to the liver were frequent, and alluded to the case recently reported by Dr. Parker where such a state of things existed.

Dr. Hinton was inclined to think that the cause of vomiting could be better explained by the known sympathy which existed between the stomach and uterine organs than by any intolerance for opium. He believed that in most of the cases of ovariotomy vomiting was one of the latest symptoms.

Dr. Peters had witnessed the operation, and was firmly impressed with the fact that it was not advisable to break down adhesions, even if they were but slight. In all such cases he was of the opinion that it was best to evacuate the sac and close the wound.

Dr. Finnell, in relation to the remark made by Dr. Hinton, stated that, in most of the cases of ovariotomy reported to the Society, vomiting was a prominent symptom whether opium had been used or not.

Dr. Emmet stated that he had had charge of four or five cases operated upon by Dr. Sims, but in neither one of these was there more vomiting than was usual after the anæsthetic.

FIBROUS TUMOR OF THE UTERUS.

Dr. Prince exhibited a specimen of fibrous tumor of the uterus, removed from a young woman, aged 25 years, on the Saturday previous. The patient first menstruated at the age of 13 years, and continued regular, though the flow was always profuse until two years since. Then she ceased to menstruate for four months, at the end of which time she was seized with profuse hæmorrhage, which, though it gradually grew less, never entirely disappeared up to the date of the operation. At each catamenial period the amount of hæmorrhage was greatly increased; yet, notwithstanding this great drain upon the system, she continued to grow fleshy. About a year ago bearing-down pains first manifested themselves, and continued at variable intervals over a period of six months, when she experienced a sensation as if something had given way. It is probable that at that time the tumor, which had previously existed in the uterus, made its exit into the vagina. When she consulted Dr. Prince she had never submitted to a vaginal examination, although having been previously under the care of four or five different physicians. Owing to narrowness of the vagina and the small size of the vaginal orifice great difficulty was experienced in making the examination. A tumor was discovered in the vagina about the size of a large goose egg, attached by a pedicle to the anterior portion of the cervical canal, about an inch within the os. The uterine sound could be passed into the cavity of the womb to the extent of about an inch and a half. She had frequently suffered from retention of urine, owing to the pressure of the tumor upon the urethra; but this symptom was in every instance promptly relieved by the use of the catheter. The vaginal walls and uterine cavity were lined with varicose veins, and when the speculum was introduced blood would ooze out from almost every portion of the mucous membrane pressed upon. The surface of the tumor was found covered with points of ulceration, caused by numerous ruptured veins, and this, together with the condition of the vagina and cavity of the uterus, explained the reason for the persistent hæmorrhage alluded to. The tumor was removed by the écraseur, a stout piece of catgut being passed around the pedicle. After the mass was separated, however, it was with great difficulty that it could be taken out of the vagina, a lithotomy forceps being required for that purpose. Immediately succeeding the operation, there was considerable hæmorrhage, caused no doubt by the laceration of some of the numerous varicosed vessels, but this was arrested effectually by the use of the persulphate of iron.

The operation, including the time for extraction, occupied full two hours and a half.

TUBERCULAR KIDNEY.

Dr. Hutchison presented a specimen of tubercular kidney removed from the body of a child aged 3½ years. Two years before death the patient was seized with the symptoms of tubercular meningitis; there were febrile exacerbations; pain in the head evinced by the frequent application of the hand to the head and corrugations of the brow; the pulse became slow, and somnolency developed itself, accompanied by strabismus and some convulsive twitchings of the muscles of the face. The treatment consisted in large doses of iodide of potassium. The child remained well up to August last, when the mother in washing it discovered the existence of a decided protuberance in the umbilical region. Being at that time in the western part of the State a physician was immediately sent for, who suspected the existence of malignant disease. Eight days subsequently Dr. Hutchison saw the child himself. He found the abdomen very much distended, the tumor being about as large as the closed fist, and there was decided flatness on percussion extending as high up as the liver, which fact gave rise to the suspicion that the disease might be connected with that organ. There was, also, very marked jaundice, with clay-colored stools. There was very little febrile excitement, and but very little pain was complained of. The child was brought home and died one week after, and but two weeks from the time the enlargement was first noticed. On post-mortem examination the tumor was found situated in the mesentery, the whole of that organ being involved in the disease. The mesenteric glands could not be recognised, neither could the pancreas. The kidneys were largely tubercular, and a tuberculous mass occupied the upper and posterior portion of the bladder. The liver was fatty, with small deposits on its peritoneal surface; the spleen apparently healthy, and the lungs presented no evidences whatever of tuberculous disease; neither was there any deposit of tubercle in the bronchial glands. No examination of the brain was permitted.

Dr. Jacobi thought that the case was a very remarkable one in two points of view:—1st. The cure of the hydrocephalus, he only having met with three such instances; and secondly, the absence of tubercle in the bronchial glands and the lungs. In that respect, he considered it almost unique. The rule was, when a number of organs were thus affected, that the bronchial glands should contain the largest proportionate deposit, then the lungs, next the liver, spleen, and then the intestinal canal, but last of all the kidney.

Dr. Krackowizer was of the opinion, after careful inspection of the kidney, that it presented an instance of parenchymatous inflammation, which had been transformed into fatty degeneration, inasmuch as only the cortical portion of the organ was affected. This was not apt to be the case in tubercle. He also thought that the appearances under the microscope might be misinterpreted in relation to the question of tubercle. It was very often the case that a cheesy mass examined under the microscope, and found to consist of detritus, oil globules, and shrunken nuclei, was called tubercle. In some respects this denomination was correct, but these were only changes brought about by the retrograde metamorphosis of tubercle, which is alike common to similar changes in other deposits. In order to draw a line as to the precise character of these deposits, it was necessary to examine those portions where the disease was not so far advanced. In conclusion, he asked Dr. Hutchison if such had been done.

Dr. Hutchison stated that he had not examined the specimen himself, but one, in whose ability for such examinations he had perfect confidence, had decided that it was tubercle. The precise appearances under the microscope were not detailed to him.

Dr. Draper thought, from the appearances of long duration of the disease of the kidney, that the meningitis occurring two years before might have been secondary to it.

PENETRATING WOUND OF THE ABDOMEN, WITH PROTRUSION OF THE OMENTUM.

Dr. Hutchison presented a second specimen, consisting of a wound of the abdominal wall, exhibiting a portion of strangulated unreduced omentum, accompanied with a written history.

Jas. Henry, æt. 24, was admitted into the Brooklyn City Hospital on the morning of May 27, 1861. He had received on the previous night, while in a state of intoxication, three stabs from a knife—one in the abdomen, one on the forehead, and one through fleshy part of arm. There was constant vomiting, great jactitation, and a frequent and feeble pulse. The wounds in the abdomen and on the forehead had been closed by a single suture, by a medical man who saw him soon after the injury; he also states that the physician returned something into the belly. The abdomen soon became distended and tender, the prostration increased, the vomiting persisted, and he died about forty hours after the receipt of the injuries.

Pos-tmortem.—The abdominal wound was situated four inches to the left of the umbilicus, and five and a half inches below the left nipple; its direction was downwards, inwards, and backwards, towards the abdominal cavity, glancing over the tenth rib; the external opening was two inches in length. On opening the abdomen a portion of the omentum was found lying in a pocket between the internal oblique and transversalis muscles, as is shown in the specimen—it had not been returned into the abdomen. There was a wound in it one-third of an inch in length, and it was in a state of inflammation; the abdomen contained some bloody serum and abundant deposits of lymph, the result of extensive peritonitis; the wound in the forehead was three inches long, extending from the middle of the right eyebrow upwards and inwards, cutting the bone to the extent of an inch and a half, and penetrating the frontal sinus, as shown in the specimen. The membrane lining the sinus was not injured, and it was not known that the knife had penetrated the cavity until its lining was removed. The wound on the arm was unimportant. The brain and thoracic viscera were healthy.

The case offers two points of especial interest:—In the first place, it illustrates the importance of exercising great care in returning a protruded organ (omentum or intestine), that it be not pushed between the tissues forming the abdominal wall instead of into the cavity. Secondly, a medico-legal question might arise in such a case as to whether the peritonitis which caused death was produced by the strangulation of the omentum in the wound, and hence chargeable to the surgeon, or by the injury *per se.*

Dr. Markoe remarked that the case was a very important one, as a type of a very frequent accident which often presented itself especially to those connected with large hospitals. Not unfrequently cases of this sort occurred. A wound has been received in the abdominal walls, and a portion of intestine or omentum is protruded. A surgeon is sent for, who, as he thinks, reduces the hernia, and closes up the wound. Two or three days subsequent to this the patient is received into the hospital in a moribund condition, with the strangulated portion in a pouch between the skin and muscles. Sometimes, as in Dr. Hutchison's case, the pouch is found between the abdominal muscles. The cause of this accident he was disposed to refer, in the first place, to the want of care in being sure that the protruding parts were fairly reduced into the abdominal cavity, and secondly, to the omission to bring together the deeper parts of the wound by a strong deep suture. The neglect of this cardinal principle of treatment was so common that it was the rule of practice in the New York Hospital to open all wounds of this nature, in order to determine whether or not a pouch had been formed in the attempt to return the tumor.

The Society then adjourned.

Dr. Lankester says that of seventy-two inquests which he held when he first became coroner, sixteen were on the bodies of murdered infants. Since then, however, the number had decreased until now he found that there were only twenty-six cases of infanticide in two hundred and fifty-two inquests.—*Brit. Med. Jour.*

The entire emigration last year into the United States was 114,475, nearly 100,000 arriving at New York.

FOREIGN CORRESPONDENCE.

LETTER XXV.

By PROF. CHARLES A. LEE.

MINERAL WATERS.

Wiesbaden, Sept., 1862.

Wiesbaden, being situated in a valley, is well protected against cold winds, but the climate is said to be very hot and oppressive in the summer months, and of course relaxing. It seems more eligible for an autumnal or winter residence than most places on the Rhine, or in the neighborhood, and I believe many English families remain here during the winter. Facilities for education are abundant, and the society very good. It must be acknowledged, however, that the native children have not a very healthy look, nor are the people remarkable for longevity; and the resident practitioners acknowledge that fevers and atonic dyspepsia are quite prevalent during the summer months, while dropsical affections, scrofula, bronchitis, and rheumatism are not unfrequent. Pulmonary consumption is said to be rare, while epidemics are unknown.

Homburg is another celebrated watering-place which I visited, and which deserves a much fuller notice than I shall be able to give it. It is less than an hour's distance from Frankfort by rail, and is made up of handsome lodging-houses and hotels, a larger number of very inferior tenements, a splendid cursaal, said to be the finest in Germany, fitted up as usual with a gorgeous saloon, with frescoed ceilings, saloons for gaming, reading-room, restaurant, etc. Then imagine a broad terrace in the rear overlooking the public garden, which is beautifully ornamented with trees, shrubs, and parterres of flowers, with an artificial lake in the centre, and wooded hills in the distance; green meadows spreading out intersected with shaded walks, with a broad carriage road on either side also bordered by trees, and all leading to the four springs, the Elizabethquelle, the Kaiserquelle, the Ludwigs, and the Stahlquellen, nearly three-quarters of a mile distant. Here in a circular inclosure several feet below the level of the walks, may be seen every morning from six to eight o'clock, hundreds of people of all nations, ranks, ages, and sexes, drinking the water, handed out by women, while near by is the stand for the musical band, which plays during the hours of drinking; as at the other springs already mentioned, a covered orangery near by serves as a promenade in rainy weather.

The Homburg waters are cold salines, muriate of soda being the principal constituent, with an abundance of carbonic acid gas. The constituents of the different springs, however, vary somewhat. The Kaiserquelle contains the largest amount of saline matters, while the Elizabeth contains iron in addition. The carbonic acid gas communicates a pleasant taste to the water notwithstanding the salt and iron—a tumbler full of this water is followed by a sensation of warmth and exhilaration, and it proves alterative, laxative, or purgative, according to the quantity taken; when it does not prove laxative, it acts as a diuretic; the iron prevents any debilitating effects even when it acts on the bowels. Dr. Funk of Frankfort, and Dr. Pagenstecher, of Homburg, both gentlemen of the highest standing, spoke to me enthusiastically of the effect of these waters in various forms of disease; and owing to the difference of composition of the different springs, stated that they are suited to a great variety of cases. They represent the waters generally as particularly useful in atonic dyspepsia, torpidity of the bowels and liver, gout, and disordered conditions dependent on luxurious and high living; but as the quantity of iron, common salt, magnesia, lime, sulphate of soda, and carbonic acid gas, differ so widely in the different springs, they represent that much discrimination is necessary in their application, and none but those who have studied the waters closely can prescribe them with safety or advantage. They find that most English patients are benefited in a greater degree by the Kaiser spring, which contains the greatest quantity of saline matter, and this is what we should expect from the known habits of the English. While in Paris I was consulted professionally by an American merchant, who has been suffering from nasal polypus, and a general derangement of health, for a year or two. There was great torpidity of the liver, with more or less derangement of the digestive functions generally; after removing his polypus I advised him, contrary to the advice of his French physician, who told him to go to the Pyrenees, to resort to Homburg, and try the waters for a few weeks. He did so, and at the end of four weeks found his health perfectly restored. The Rev. Dr. McClintock, also of New York, now in charge of the American Chapel in Paris, has derived the greatest benefit from these waters during the present season. On the whole Homburg mineral waters rank among the most valuable in Germany, if not in all Europe. Those of Schwalbach, Schlangenbad, Ems, Weilbach, Soden, Kronthal, Trachingen, Selters, Aix-la-Chapelle, Spa, Kreutznach, Nanheim, Rippoldsau, Wildbad, etc., must be reserved for a future period. Other topics of perhaps equal or more importance, and of a different kind, must hereafter claim our attention. It is my object to introduce into my letters as great a variety of subjects as possible, and I am aware that I have given to mineral waters a more extended notice than many will consider expedient; still, it seemed to me that a condensed account of the more important watering-places of Germany and France would not be inappropriate to the pages of your Journal. Should you take a different view of the matter, you are at perfect liberty to consign what I have written to the flames.

American Medical Times.

SATURDAY, FEBRUARY 21, 1863.

INCREASED RANK IN THE ARMY MEDICAL CORPS.

The recent debate in the U. S. Senate on the Medical Reform Bill elicited a degree of opposition to improvements and additions to the medical staff of the army quite unaccountable. The most reasonable and necessary requirements of the department were treated with manifest indifference, while the recommendations for greater power and higher rank were received with scorn and even contempt. The proposed enlargement of the medical corps, in order to meet more adequately the daily increasing service, was met with the cry of economy. The shallow idea of economy which governs our legislators was thus rebuked by a representative; "We give freely when we are asked to appropriate millions of dollars for the construction of useless canals, but a proposition to supply the crippled soldier with an artificial limb is defeated on the score of economy." "Whenever," said Senator Wilson, "we have asked for an increase of the force necessary for the proper organization of the army, of the medical department, or the other departments of the army, we have been met by a stern resistance here. Sir, if at once the proper officers, with the proper rank, and the proper salaries, had been promptly appointed and performed their duties, they would have saved tens of millions of dollars to this country." He should have added, what is of infinitely greater importance, that they would also have saved tens of thousands of soldiers from lingering sickness and premature death. Senator Harlan very aptly said of the proposed addition to the medical corps: "It will necessarily involve a very large expenditure of money, but then it will be an expenditure in the right direction."

When the debate finally touched upon the proposition to give higher rank to certain medical officers Senator Wilson, Chairman of the Military Committee, thus briefly, but forcibly, set forth the importance and reasonableness of the measure:—

> "The fifth section provides that the chief medical director of departments and armies in the field and the senior surgeon on duty in the Surgeon-General's Office, regularly so assigned by the War Department on the detail of the Surgeon-General, shall have the rank, pay, and emoluments each of a colonel of cavalry. The surgeon at the head of the army of the Potomac has the same rank as the surgeon of a little regiment of two hundred. The one has the responsibility of taking care of a couple of hundred men; the other has the responsibility of superintending and directing all the surgeons in that great army; and this section simply provides that the surgeon at the head of a department, or at the head of an army in the field, shall have this promotion. It seems to me that a surgeon at the head of a large army in the field, who has the direction of all that concerns the medical department of the army, should have a higher rank than the surgeons in the regiments that compose the army. He has vaster responsibilities, and he has greater expenditures. If Senators think the rank of colonel too much, then make it a lieutenant-colonel; but it appears to me to be wrong that the surgeon at the head of a large army should have simply the rank of the surgeon of a regiment. Sir, the Surgeon General of the British army of one hundred and fifty thousand men is a major-general, and the British army has six or eight other surgeons who are brigadier-generals. They have thirty surgeons who enter the field as lieutenant-colonels, and when they have been there three years become colonels. For their little army of one hundred and fifty thousand, about as large as the army of the Potomac, they have got a major-general and six or eight brigadier-generals, and thirty colonels in the English medical department. Sir, I do not stand here as a special friend of the medical department of the Army. I think this indiscriminate censure we so often hear is undeserved. A great number of these men toil night and day with fidelity to their profession and to the country, and I think they are entitled to the same consideration that other men who serve their country faithfully are entitled to."

But notwithstanding this manly and truthful appeal Senators gave utterance to opinions betraying a degree of ignorance of the wants of the Army, and of prejudice against a most laborious and self-sacrificing corps of officers, unworthy of American Legislators. Senator Hale "denounced the idea of Surgeons having any rank at all." Senator Fessenden petulantly remarked:—"I am very glad that there is one section in this bill—I believe it is the only one—which does not propose to relieve the sick and wounded soldiers by increasing the pay and rank of the Surgeons." Senator Rice declared he would vote against this bill because the officers in the different governmental departments were so ignorant of their duties. "There is not a department," he alleged, "in the Army that is not here asking for an increase of major-generals, or brigadier-generals, or clerks, or colonels, or majors, or captains," and this was to him a sufficient reason for refusing to favor any measure designed to give greater efficiency to the medical department. Senator Wilkinson, who moved that the section giving rank and pay to medical officers be stricken out, said, "he had noticed, ever since the war commenced, that whenever there was a desire on the part of some men to get a larger salary than anybody knew anything about, they were anxious to get the pay of captain, major, or colonel of cavalry." Therefore he proposed to set about reform, by refusing to give medical officers any increase of rank or pay.

With such trivial arguments the section was defeated, and the Bill passed, thoroughly divested of every useful provision. It is humiliating to read this ill-digested debate, as it betrays such a wanton trifling with the health interests of the Army. While the Government holds the medical department strictly accountable for the health of the soldier, it withholds the means and necessary measures for accomplishing this object. This war has already demonstrated the power of the medical staff to maintain the thorough efficiency of armies when properly sustained by those collateral aids which rank always gives. Rank is not more the right of the Surgeon than a means of greater efficiency. In whatever light, then, the proposition to increase the rank of Surgeons is viewed, to the intelligent and humane mind it will be conceded to be just and necessary.

THE WEEK.

A London Contemporary comments severely on an "Anatomical Museum" which is opened to the public. Its remarks apply with great force to similar exhibitions in this city:—

> "This institution we have visited, and commend it to the notice of—the police. As an outrage on public morality it cannot be surpassed. A filthy catalogue details the character of the preparations and the merits of the author, which are fittingly discussed together. So long as such 'museums' were confined to the neighborhood of their models, rogues and prostitutes were free to enter and contrast their ailments with each other, and compare them with the wax impressions their fraternity had supplied. Though the evil was great, yet its influence was, with few exceptions, limited to individuals hackneyed in the ways and familiar with the usages of vice. Occasionally inexperienced strangers were induced to enter. They ever had bitter cause to regret having done so. In the majority of instances, the proprietor either possessed or suborned qualifications not within the control of our Colleges. These exhibitions, constituting moral plague-spots in the metropolis, assumed an air of pseudo-science which removed them from the category of the uselessly obscene. Though this could not prevent disgust, it yet procured toleration. English medical men had happily hitherto abstained from the extreme degradation of their connexion. It was believed, whether rightly or wrongly, that certain restrictions were exercised in reference to the general visitor. The profession and the public, by a tacit understanding, came to recognise such museums as evils incidental to the extended liberty of our social system. By virtue of toleration, and no other title, has their permissive right become established. In Dublin, where similar exhibitions were attempted, the authorities at once caused them to be closed. Here apathy has hitherto prevailed; except when some unusual act of plunder, or excessive flagrancy on the part of the advertising expert, drives a wretched dupe to bay, little attention is paid to their existence. Even then they acquire but a limited publicity. One of the parties is generally unwilling to be exposed, and the other always anxious to come to terms, and so the fool and the rogue agree to a compromise. We can recall many instances in which, from museums similar to that by which George-street is at present degraded and outraged, poor weaklings have dated their moral and physical wretchedness."

We have several times noticed the Cottage Hospital at Cranley, England, a small country town. The annual report is again published, and many interesting facts are presented. The establishment has but six beds, and the entire cost is but $600 a year. The necessity for such institutions exists in every considerable town in the country. The poor, or persons suffering from diseases or accidents which require special care and nursing, would find a home in these small hospitals. The following suggestions by the surgeon to those who contemplate establishing such an asylum, are from this report:—

> "The following suggestions, resulting from a necessarily limited experience, are offered, with all deference, to those wishing to establish a similar institution. In a purely rural district, a well-ventilated cottage, containing a kitchen and room adjoining, with a wash-house and pantry on the ground-floor, and four airy bedrooms, will, with a little fitting up, be all that is required, allowing one bed to about one thousand of the population to be embraced in its sphere of action. For its commencement a sum of about £9 10*s.* per bed will be required. For its support, the payments of the patients, ranging from 3*s.* to 5*s.* per week (which are always readily afforded by friends or employers), and a few annual subscriptions, will suffice. For its management, a few trustees, and a *small* committee, acting on a perfectly independent basis. Patients to be recommended, but *not nominated*, by subscribers; the admission to rest with the medical officer in conjunction with the manager."

Dr. George P. Cammann died on Saturday, Feb. 14, at his country seat, at Fordham. He had been suffering an attack of pleuro-pneumonia, from which he seemed to be convalescing favorably, until an hour before his death, when alarming symptoms suddenly occurred, which quickly terminated fatally. In the death of Dr. Cammann the profession has lost one of its most distinguished members. He was, doubtless, one of the most advanced and accurate students of pulmonary and cardiac diseases in this country. He pursued his studies chiefly at the Northern and Demilt Dispensaries; and though possessed of great wealth he did not fail for years in his regular daily attendance at these charities. Dr. Cammann has published but little, owing to a natural aversion to publicity; he was never seen in any of our societies, and but seldom in any medical circles. Still he was universally regarded in this community as one of the brightest ornaments of the profession. We shall hereafter give a more extended biographical sketch.

That the Medical Department of the U. S. Army is now managed with great ability and success by Surgeon-General Hammond, we have the most decided testimony of those who are familiar with its organization and operations. But it is more gratifying to learn of its successful management from entirely disinterested sources. We are informed by a medical gentleman, just returned from Europe, that in conversation with the Medical Director of the British army, he expressed the most decided admiration of the management of our Army Medical Department. He obtains direct information from an agent of his own department, Inspector-General Muir, who is now on a tour of medical observation in our Army. Gen. Muir was present at the battle of Antietam, and remarked that no battle-field was ever as quickly and abundantly provided with every necessary for the wounded.

The New York State Medical Society, at its late session, recommended that the American Medical Association should hold its annual meetings notwithstanding the present war. We have on other occasions urged the importance of maintaining the integrity of the National Association by holding its regular sessions, and in this we have lent expression to the opinion of the profession of this State. But in other quarters there is strong opposition to the call of another meeting until the war is concluded, and this opposition controls the action of the local committee. We do not, therefore, anticipate a meeting this year.

Correspondence.

RAILROAD PROVISION.

Yonkers, Feb. 13, 1863.

[To the Editor of the American Medical Times.]

Sir:—I was pleased to see in your last issue a notice of Dr. Ludlow's excellent case of instruments for railroad use. This is at least a move in the right direction. To any one, however, who has taken the trouble to look into the numerous kinds of accidents occurring, it must be obvious that this alone will not begin to reach the magnitude of the evil to be grappled with. What is mainly wanted is a receiving room, as near to the scene of disaster as possible, with surgical assistance of *known* competence, near at hand, where the injured might be kept in quiet until the first shock is overcome and the first reaction subdued, then removed in the easiest possible manner, wherever it may be desired; all necessary professional aid being, of course, meanwhile rendered. My plans comprehend, if I may so express it, a general Railroad Hospital for the State, adapted for temporary purposes, of which every surgical station shall constitute an accident ward, and this by a plan so simple and inexpensive, that while the first outlay will not be great, the benefit accruing therefrom will, from the start, not only cover it, but prove an actual source of economy to the Companies. Thus much accomplished, and public attention aroused, the necessary accessary arrangements both in and out of the cars will follow as a matter of course. Railroad managers will not examine into the matter; and as the general press has made but little allusion to it, the public have no means of knowing anything about it, although professional men, and the medical press generally throughout the country, have cordially endorsed "the necessity and propriety," as well as the practicability of medical provision for railroads.

The Profession, I think, might, and, believing in such provision, ought, to take more than a silent interest in this question; possessing, as many of them do, influence with the local press in their respective neighborhoods; and if they would exert it, more especially on the lines of railroad, and thereby bring the proposed plans before the public, the foundation of a successful movement, beyond the power of any single individual to carry on, would be laid, and favorable legislative action be thereby ultimately secured.

Yours, &c.,
Edmd. S. F. Arnold, M.D.

The Paymaster-General of the State of New York reports that, to prevent a misapplication of bounties, Dr. Wey examined at Elmira 2,372 recruits, and rejected 305. Dr. Cogswell examined 5,827 at Albany, and rejected 458. Dr. Thomson examined 8,707, and rejected 207. From this statement it appears that the examination of recruits was more thoroughly performed in this city by Dr. Mott than by surgeons in other parts of the State.

Professor Esterle of Novaro has died at the age of forty four, from purulent infection, contracted while attending a difficult labor.

Army Medical Intelligence.

Surgeon-General's Office,
Washington City, D.C., Feb. 9, 1863.

Sir:—The Secretary of War, upon the request of the Surgeon-General, having authorized the Paymaster-General to deduct from the pay of officers treated in hospitals seventy-five cents per day while they are so treated, which amount will be credited to the Medical Department, to be used for the maintenance of those hospitals, you will direct the Surgeons in charge of all hospitals under your direction, in which officers may be treated, to observe the following rules in future.

I. Seventy-five cents per day will be charged to all officers treated in U. S. hospitals, which amount will not be received, however, by the surgeon in charge of the hospital.

II. Account will be kept of the number of days during which any and every officer remains in hospital, and upon the last day of each month a report will be sent to this Office, in the following form:—

——— of General Hospital at ——— month — 1863.

Name.	Rank.	Regt.	Co.	No. days in hospital.
A. B.	Captain.	2d Infantry.	A.	26
C. D.	Colonel.	1st Ohio.	B.	81
E. F.	Lieutenant.	6th N. Y.	C.	4

In making the above report, surgeons in charge of hospitals will arrange the names regimentally, all of the same regiment together on the roll.

III. All bills against hospitals devoted exclusively to the use of officers, will be forwarded upon the last day of each month to this Office, for payment, including compensation for cook, nurses, etc.

IV. Upon all certificates of identity given to officers in hospitals, to enable them to draw their pay, will be distinctly stated the number of days which the officer has spent in the hospital, and for which pay is due to the hospital.

Very respectfully your ob't serv't,
By order of the Surgeon-General.
(Signed)
Joseph R. Smith,
Surgeon U.S.A.

ORDERS, CHANGES, &c.

Ass't Surgeon J. B. Brinton, U.S.A., has been relieved from duty in charge of General Hospital No. 2, Frederick, Md., and assigned to Fort McHenry, Md.

Surgeon C. F. H. Campbell, U.S.V., lately on duty as Medical Director of transportation at Frederick, Md., has been assigned to duty at Harper's Ferry, Va.

Surgeon H. S. Hewit, U.S.V., has been relieved from duty at Frederick, Md., and is awaiting orders in New York.

Ass't Surgeon William Moss, U.S.V., has relieved Assistant Surgeon V. B. Hubbard, U.S.A., as recorder of the Army Medical Board, for the examination of Surgeons and Assistant Surgeons of Volunteers.

Surgeon B. J. D. Irwin, U.S.A., Medical Director, Department of the Southwest, has been instructed to relieve Surgeon H. R. Wirtz, U.S.A., as Superintendent of Hospitals at Memphis, Tenn., the latter on being relieved to proceed to Madison, Wisc., and relieve Surgeon W. J. Sloan, U.S.A., in his duties as Medical Director, Department of the Northwest.

Surgeon J. L. Le Conte, U.S.A., now in charge of the General Hospital at Chester, Pa., has been directed to report to the Assistant Surgeon-General at St. Louis, Mo., for duty as Acting Medical Director.

Leave of absence has been granted to the following named officers:
Act. Ass't Surgeon J. P. Wyer, U.S.A., for six days.
Ass't Surgeon Lewis Taylor, U.S.A., for twenty days.
Surgeon W. D. Newell, 28th New Jersey Vols., for fifteen days.
Ass't Surgeon Geo. Yeomans, 23d Pennsylvania Vols., for thirty days.
Surgeon J. Q. Osburn, 42d New York Vols., for thirty days.
Surgeon N. P. Rice, 18th New York Vols., for fourteen days.

So much of Special Orders No. 195 of 1862, as dismissed Assistant Surgeon A. Putze, 4th Pennsylvania Reserve Corps, has been revoked, he having previously been discharged the service by resignation, at the Headquarters of the Army through which he was reported for dismissal.

Surgeon Ebenezor Swift, U.S.A., Medical Director, Department of the Cumberland, has been ordered to report to the Medical Director at Baltimore, for duty in the General Hospital, Chester, Pa.

The following Medical Officers are by direction of the President, dismissed from the service of the United States, for incompetency.

Surgeon Geo. W. Barr, 64th New York Vols.
Surgeon O. C. Gibbs, 21st New York Vols.
Ass't Surgeon J. W. Keys, 133d Pennsylvania Vols.
Ass't Surgeon Albert Utter, 36th New York Vols.
Ass't Surgeon W. H. Wiser, 2d New York Artillery.

Surgeon G. G. Shumard, U.S.V., has been assigned to duty at Lexington, Ky., as Medical Director of Central Kentucky.

Surgeon R. A. Christian, U.S.A., has been placed on duty as Attending Surgeon on officers and soldiers stationed at San Francisco, Cal.

Ass't Surgeon E. J. Whitney, U.S.V., has arrived in New Mexico, and has been assigned to duty at "Los Pinos."

Ass't Surgeon Lewis Taylor, U.S A., has reported in person to the Surgeon-General for duty. He was relieved at Camp Pickett, San Juan Island, by Assistant Surgeon C. C. Dnmreicher, U.S.V.

Surgeon J. G. Keenon, U.S.V., has been assigned to duty as Medical Director, District of Memphis, Tenn.

Leave of absence for twenty days has been granted to Acting Assistant Surgeon J. J. Moxley, U.S.A., and for seven days to Acting Assistant Surgeon J. O. French, U.S.A.

Surgeon R. B. McCay, U.S.V., has been relieved from duty in charge of the Chesapeake Hospital, Fort Monroe, Va., and has been assigned to the charge of the Macon House Hospital, Portsmouth, Va.

Surgeon W. J. Sloan, U.S.A., now Medical Director, Department of the Northwest, at Madison, Wisc., has been ordered to report to Major-General Wool for duty in New York city.

Surgeon Henry S. Hewit, U.S.V., now in New York waiting orders, has been ordered to report to Major-General Grant.

The leave of absence heretofore granted Assistant Surgeon R. O. Craig, has been extended thirty days.

Surgeon D. W. Hartshorn, U.S.V., has been assigned to the charge of the Gayoso Hospital at Memphis, Tenn.

Leave of absence for ten days has been granted to Surgeon A. Wynkoop, U.S.V.

Surgeon J. E. Quidor, U.S.V., late Medical Director, District of Kansas, has been ordered to report for duty to the Medical Director at Memphis, Tenn.

Surgeon Clark McDermont, U.S.V., has been ordered to duty as Medical Purveyor, Department of the Cumberland, Murfreesboro, Tenn.

Surgeon John H. Rauch, U.S.V., is on duty as Medical Director at Baton Rouge, La.

Surgeon W. M. Chambers, U.S.V., is on duty in charge of General Hospital No. 15, Nashville.

Surgeon T. F. Azpell, U.S.V., has been relieved from duty in charge of the Marine Hospital, St. Louis, and assigned to duty as Acting Medical Inspector, District of St. Louis, Mo.

Surgeon C. F. H. Campbell, U.S.V., has been assigned to duty at Harper's Ferry as Medical Director, General Kelly's command.

Extract. Special Orders 57. A.G.O. It being impossible to restore Surgeon E. S. Hoffman, 90th New York Volunteers, to his command, the vacancy having been filled, so much of Special Orders No. 411, series of 1862, as dismissed him from the service, is hereby revoked, on condition that he will tender his resignation, on which he will be honorably discharged as of the date of dismissal, he having relieved himself from all imputation implied in the aforesaid S. O. No. 411.

Upon the conditions of Special Orders 57, A. G. Office, Surgeon E. S. Hoffman, 90th New York Vols., has been honorably discharged the service to date December 24, 1862.

Surgeon J. H. Taylor, U.S.V., has returned from leave of absence and resumed his duties as Medical Director, 2d Army Corps.

Surgeon Norman Gay, U.S.V., is on leave of absence for twenty days at Columbus, Ohio.

Leave of absence for twenty days has been granted to Assistant Surgeon J. T. Duffield, 7th Indiana Vols.

The leave of absence heretofore granted Surgeon G. S. Potler, 145th Pennsylvania Vols., has been extended five days.

Hospital Steward L. E. Atkinson, U.S.A., has been appointed Assistant Surgeon of the 12th Pennsylvania Cavalry.

Leave of absence for thirty days has been granted to Surgeon L. H. Carey, 12th Wisconsin Vols., for twenty days to Assistant Surgeon R. A. Dodson, 1st Maryland Cavalry, and for seven days to Assistant Surgeon H. Allen, U.S.A.

Surgeon Thomas Sim, U.S A., has relieved Surgeon G. L. Pancoast, U.S.V., as Medical Director, 3d Army Corps. The latter has reported to General Stoneman as Medical Director of the Corps of Cavalry.

Surgeon John Moore, U.S.A., has relieved Assistant Surgeon R. O. Craig, U.S.A., as Medical Director, 5th Army Corps. Dr. Craig has been assigned to duty as Surgeon in Chief, Sykes' Division, 5th Corps.

Ass't Surgeon M. H. Picot, U.S.V., has been assigned to duty at the Eckington Hospital, Washington, D. C.

Ass't Surgeon J. L. Harriman, 13th Massachusetts Vols., has been honorably discharged on Surgeon's certificate of disability.

Surgeon J. H. Boucher, U.S.V., has been assigned to duty as Medical Director, 17th Army Corps, at Memphis, Tenn.

Surgeon J. S. Bobbs, U.S.V., temporarily on duty at Memphis, Tenn., has been ordered to report to the Medical Director, Department of the Tennessee.

Ass't Surgeon J. H. Bill, U.S.A., now on duty at Frederick, Md., to report to Surgeon R. S. Satterlee, Medical Purveyor in New York, for duty connected with the preparation of Medical Supplies.

Paragraph 9 of Special Orders No. 6, current series, mustering out of the service of the United States, Assistant Surgeon A. J. Libby, 24th Maine Vols., has been revoked.

Surgeon A. J. Phelps, U.S.V., has been assigned to duty as Medical Director 21st Army Corps, at Murfreesboro', Tenn.

Surgeon G. D. Beebe, U.S.V., has been placed on duty as Medical Director 14th Army Corps, at Murfreesboro'. Tenn.

Surgeon W. Hayes, U.S.V., has been placed on duty at the Headquarters of the Peninsular Brigade, Druunnondtown, Va.

Surgeon A. M. Clark, U.S.V., is on leave of absence at Williamsburgh, L. I.

Ass't Surgeon R. R. Taylor, U.S.V., has been assigned to the General Hospital, Hestonville.

Surgeon J. G. Holston, U.S.V., is on leave of absence at Zanesville, Ohio.

Surgeon G. H. Hubbard, U.S.V., has been assigned to duty as Medical Director, District of S. W. Missouri.

Medical News.

Death of Geo. P. Cammann, M.D.—A special meeting of the New York Academy of Medicine was held on Tuesday, Feb. 17, 1863, to take action in reference to the death of their late Fellow, Geo. P. Cammann, M.D., Dr. James Anderson, President, in the chair.

The President appointed the following named committee to draft resolutions suitable to the occasion:—Drs. V. Mott, A. H. Stevens, and J. Linsly.

The committee presented the following Preamble and Resolutions, which were unanimously adopted.

In the inscrutable wisdom of our Heavenly Father, he has been pleased to remove from amongst us our distinguished brother, George P. Cammann, M.D., aged 59 years.

While we bow with humble submission to the Divine dispensation, we cannot but feel most keenly the severe loss we have sustained.

Pursuing his profession for the pure love of it, we believe he had no enemies to disturb his equanimity. Kind and amiable towards all, he was a pattern of integrity and truth. No one knew him but to admire. He was a noble specimen of great modesty and rare worth.

Resolved, That we attend the funeral of our deceased fellow member, and manifest our sorrow by wearing the usual emblem of mourning.

Resolved, That a copy of the preceding Preamble and Resolution be signed by the President and Secretary, and transmitted to the family as a testimony of our profound sympathy for their afflictive bereavement.

Resolved, That the above be published in the American Medical Times, and in the daily newspapers.

V. Mott, M.D.,
A. H. Stevens, M.D.,
J. Linsly, M.D.

The Academy attended the funeral at St. John's Chapel, where the Order for the Burial of the Dead was said, after which the remains of their late Fellow were conveyed to Trinity Cemetery for final interment.

John H. Hinton, M.D.,
Recording Secretary.

At a meeting of the physicians and surgeons of the Demilt Dispensary, held Feb. 16, the following preamble and resolutions, prepared by a Special Committee, were unanimously adopted:

Whereas, by the dispensation of Providence, Dr. George P. Cammann our esteemed friend and lamented colleague, has been suddenly removed from us by death, therefore

Resolved, That the Demilt Dispensary, in its entire organization—contributors, managers, medical staff, and recipients of its charitable aid—has to mourn, in the decease of Dr. Cammann, the great loss of one who, from nearly the first establishment of this institution, has, by his unwearied assiduity and eminent skill, largely contributed to its success, its reputation, and the accomplishment of its benevolent aims. In the relation of medical associate we have found him a courteous friend, a skilful adviser, a man of retiring modesty and disinterested benevolence. The untiring zeal with which, during nearly his whole professional career, though independent in means, he has devoted himself daily to charitable service in this and other institutions; and the enthusiasm and success with which he has pursued the special department of Physical Diagnosis, of which he was one of the first cultivators in this country, render his example worthy of our emulation, and secure to his memory a lasting remembrance from every lover of science.

Resolved, That the Medical Board of the Demilt Dispensary extend their warmest sympathy to the large circle of bereaved relations and friends upon whom this great affliction has fallen.

Resolved, That as a last tribute of respect to the deceased the Medical Board will attend his funeral.

Resolved, That a copy of these resolutions be transmitted to the family of the deceased and published in the American Medical Times and daily journals.

WILLIAM B. BIBBINS, M.D., Chairman.
Gouverneur M. Smith, M.D., Secretary.
William R. Donaghe, D.D., }
E. R. Peaslee, M.D., } Committee.
George L. Hyslop, M.D., }

Clarke's Diary, a Southern paper, has the following estimate of the losses of the *Confederates*—Killed, 20,893; wounded, 59,615; prisoners, 22,169; total, 102,677; died from sickness, disease, and wounds, 120,000.

Dr. Louis Bauer is the newly appointed Health Officer of Brooklyn, N. Y.

The hospital for the insane at Brattleboro, Vt., was partially destroyed by fire on the 21st of December.

Original Lectures.

LECTURES ON MILITARY SURGERY.

DELIVERED AT THE
COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.
By WILLIAM DETMOLD, M.D.
PROFESSOR OF MILITARY SURGERY AND HYGIENE.

LECTURE IX.

Ligature of Vessels.—Tetanus.—Secondary Pneumonia.—Hectic Fever, and Hospital Gangrene.

Gentlemen:—At the conclusion of our last lecture we were occupied with the means of arresting secondary hæmorrhage in gunshot wounds, and we have considered those means under four heads, namely, 1, pressure; 2, ligature of the bleeding vessel in the wound; 3, ligature of the trunk of the artery above the wound; 4, amputation. Of the three first we have spoken, and of the fourth we have but little to say, except that it is the surest way of arresting the hæmorrhage, but of course it is an extreme measure, a mutilating operation, which always endangers life, for where the necessity for it arises the amputation has generally to be performed high up near the trunk. You will perceive that in stating the shortcomings of each of the four methods I have tried to point out the serious character of the accident. The choice between these different measures must be left to the judgment of the surgeon in each case, and in this choice the judicious and conservative surgeon will save the largest number of patients. You will bear in mind that the method which seems the most plausible, and which has, perhaps, the largest number of paper authorities in its favor—I mean ligature of the bleeding vessel in the wound—is just the one which I value the least, and should advise you to have recourse to it only where the locality forbids the others, as, for instance, in hæmorrhage from an intercostal. Where pressure is applicable, always try that first, it frequently succeeds. Where you decide upon tying the trunk of the artery, do not go higher up than is necessary, yet you must go beyond the origin of the large branches, which keep up the collateral circulation, otherwise the hæmorrhage will return from the distal end. Where you have hæmorrhage in a deep wound of the face from the internal maxillary, tie the external carotid; it is a less serious operation in its consequences than ligature of the common carotid, and arrests the hæmorrhage with more certainty, because you avoid hæmorrhage from the distal end in consequence of the free anastomosis within the skull. Where you have bleeding from the axillary or the upper part of the brachial do not perform the ordinary operation of ligature of the subclavian above the clavicle; it is too grave an operation, but apply the ligature to the vessel below the clavicle. This is a very simple operation. Push the shoulder up a little, and make an incision one and a half to two inches close to and below the second bend of the clavicle, keep close to its lower edge and cut through the fibres of the pectoralis major, and you will, without difficulty, come upon the artery, only take care you do not wound the vein, which will sometimes bulge a little over the artery.

Some time ago I was sent for by Dr. Stillman, of Plainfield, N. J., to see a Mr. D., who, while out shooting, sat down with his loaded piece between his legs; his dog touching the trigger the whole charge went through the axilla, making a frightful lacerated wound. At first there was no hæmorrhage, but on dressing the wound on the third day after the accident, a large arterial jet showed that the axillary was divided; the wound was closed immediately, and pressure made in the axilla till my arrival. I found the man perfectly blanched and utterly exsanguinated, and so prostrate from the enormous loss of blood that I did not even venture to administer chloroform or change his position in bed. I tied the artery at the place and in the manner indicated above; bleeding did not return, and the man made a good recovery, but retained a contraction of his hand and fingers in consequence of the injury to the axillary plexus.

When hæmorrhage occurs from a stump after amputation, the question arises—Is it best to reopen the stump? This should only be done if the bleeding occurs within the first twenty-four hours after the operation, and then it is not secondary but primary hæmorrhage, which ought not to occur, and would not if you follow the direction I have given you, *i. e.* not to be in a hurry to unite the flaps. If true secondary hæmorrhage takes place from a stump, I prefer by far the ligature of the trunk to a second amputation, because, in that case, the great drawback to that proceeding, viz. gangrene, is not so likely to follow, although it will occasionally do so in the flaps.

Let me take this opportunity to recommend you here a proceeding which I have adopted with great advantage in all operations for many years past, and which strikes me as offering additional advantages in military surgery. The ordinary mode of clearing a wound of blood during an operation is by wet sponges; an assistant is constantly engaged in pressing the wet sponge upon the bleeding surface, but as he removes it, and before the operator can take advantage of the clear field, it is filled again with blood. Now, if you will once try to use an old dry towel instead of a wet sponge, you will find that the surface of the wound will remain much longer entirely free from blood. In military hospitals this has the additional advantage that it dispenses with sponges, which are the most prolific vehicles for communicating poison, such as hospital gangrene and pyæmia, whereas the towels are more readily purified by boiling, which should always be substituted for ordinary washing of all these articles which have been in contact with suppurating wounds, and which are likely to become the fomites of contagion.

You all know what a formidable complication to a wound is the advent of lock-jaw. I do not know that the danger of lock-jaw is greater in military hospitals than anywhere else; I am inclined to think not, and that gunshot wounds cannot justly be charged with any more responsibility on that score than other wounds. The circumstances which favor the development of trismus and tetanus are as yet not fully appreciated. We are apt to believe, because we are often told so, that cold and dampness favor the disease, yet we find it much more frequent in hot climates; and on the other hand we do not hesitate to use freely cold and wet applications to all wounds. I therefore prefer to say, I do not know, to retailing to you all the various speculative theories. But, as I say, I do not believe that gunshot wounds or military hospitals are chargeable with more than the ordinary proportion of cases of lock-jaw; and I will merely state that where the first symptoms of the disease have once developed themselves, you have nothing to hope from amputation. Chloroform, large doses of opium, and brandy, constitute, in the present state of our knowledge, the best treatment, and if they do not cure the disease, they deserve at least consideration, if only with a view to euthanasia.

You will hear occasionally statements or reports that wounded have died of pneumonia, leading you perhaps to infer that, if this additional disease had not supervened, the man might or would have recovered. Now this is a mistake; pneumonia in these cases is not an additional idiopathic disease or accidental complication; it is a mere symptom, a link in the chain, it is the closing scene, the vital organs becoming involved in the struggle. It is therefore called consecutive pneumonia, and in many cases is simply a hæmostatic lesion.

Pure hectic fever, that is, a gradual sinking with emaciation, colliquative sweats, and diarrhœa, etc., I think is comparatively less frequent in military hospitals than elsewhere; perhaps because where so many dangers threaten all around, an accident such as pyæmia, or the like, will supervene and close the scene more abruptly, and also because most of the cases will be modified by the prevailing epidemic character, such as typhus, dysentery, scurvy, etc. Hospital gangrene, as the name expresses, is a peculiar kind of contagious gangrene which we meet with in hospitals. This disease is developed by crowding too many wounded together, or occupying the same wards for too long a period with a succession of wounded, so that those who have sown the first seed of the disease may have left the hospital long before it manifests itself; but it may also be imported into perfectly well policed hospitals by introducing patients suffering with it, or by introducing the contagious matter in some other way. Thus it is known to have been introduced into military hospitals through lint which had been used before, and had been washed. Fortunately the disease is quite as preventable as it is formidable; its characteristic symptoms are as follows:—It shows itself only in wounds, which become covered with a greyish pulp, which consisting partly of fibrinous croupy deposit, partly of the debris of necrosed tissue. The destruction of parts proceeds in some cases rapidly, in others more slowly, according to the intensity of the poison; the wound always assumes a round form, and is surrounded by a narrow circle of erysipelatous inflammation, while the parts are œdematous and quaggy in consequence of the subcutaneous and intramuscular cellular tissue being destroyed more rapidly than the other tissues. The disease is accompanied by a peculiar burning pain, and emits an offensive acrid fetor which cannot be mistaken. Hospital gangrene is accompanied by constitutional disturbance, generally of a low typhoid character, with great mental depression, although some writers speak of a highly inflammatory fever requiring even the use of the lancet. In some epidemics the disease is very acute, leading to a rapid destruction of parts; in others it is of a milder type, wearing out the system slowly and by repeated hæmorrhages, the coats of the artéries having sloughed, and of course any wound for the purpose of applying a ligature turns only into a new starting-point for the disease.

The proper treatment of hospital gangrene consists in immediately removing the patients from the infected ward, and strictly isolating those affected with it from the other wounded. The poison should be destroyed in the wound either by actual or potential cautery. The best is the concentrated nitric acid. Fowler's solution has been recommended as a local application, and probably owes its virtue partly to its escharotic property, partly to its antiseptic power; but it must be borne in mind that, applied over a large surface, it may give rise to symptoms of arsenical poisoning. As the sloughing ceases, and the parts assume a healthier appearance, the mineral acids may be used locally in a diluted form; withal a generous diet, and the internal administration of opium. During the prevalence of hospital gangrene all operations must of course be avoided.

All authors agree that hospital gangrene is contagious and infectious, but they differ in opinion as to whether it is a local poisoning, producing the constitutional symptoms, or whether it is a blood poisoning which gives rise to the local phenomena. Now, without intending to enter here into a speculative discussion, I must say that I incline decidedly to the theory of its being merely a local disease, for the following simple reasons:—1st. It only attacks wounds without reference to their character or their gravity; as long as your skin is entire and unbroken, you may with impunity remain for any length of time exposed to the poisonous atmosphere, very different from what occurs in pyæmia, where the effect of the poison will show itself in constitutional disturbance, even where there is no wound. 2d. The peculiar round form which the disease assumes, analogous to some other local diseases. 3d. The readiness with which the disease yields when its local focus is destroyed, and this once destroyed, and the patient removed from new infection, it will not reappear, which it probably would do were it a blood disease. To my mind it is not improbable that the disease may have its origin in the rapid generation of a destructive microscopic fungus; some of its phenomena at least seem to me to favor such a theory. In an interview which I recently had with the Surgeon-General, I expressed this view to him, and he immediately dispatched an able microscopist to Annapolis, where there were at the time some hundred and fifty cases of hospital gangrene, the disease having been brought there by prisoners from Richmond. I have not yet learned the result of the investigation.

Original Communications.

NOTES ON MEDICAL JURISPRUDENCE.

By THOMAS C. FINNELL, M.D.,

OF NEW YORK.

I. CERTIFICATE OF DEATH.

It very frequently happens that medical practitioners are greatly embarrassed in reference to the proper manner of proceeding in cases of sudden death occurring in their practice, or their immediate vicinity. This, no doubt, arises from the fact of their not being familiar with the laws relating to that subject.

We propose, briefly, to call attention to several points in relation to this subject; among them, those cases of sudden death in which a physician is justified in granting a certificate of burial, and also the cases in which it is his duty to withhold the same, and refer the matter to the coroner for investigation. This may seem to be a very simple matter, hardly requiring a passing notice; but it is only necessary to observe the confusion that attends a funeral when the undertaker, at the last moment, informs the family that the certificate furnished by the physician is imperfect, and it will be necessary to hold an inquest on the body, and determine the true cause of death, and the manner in which it was produced. The revised statutes of this State contain the following ordinance* in reference to this subject: "No sexton, or other person having charge of any place of interment in the City of New York, shall, under a penalty of two hundred and fifty dollars, inter, or permit to be interred, any dead body therein, without having first received a certificate, stating the name, apparent age, birth-place, date, and place of death, and the disease of which he or she shall have died, signed by the attending physician; or, in case no physician shall have attended such deceased person, then by some (member) of the family of the deceased; or, in case of an inquest having been held, by the coroner; which certificate shall be deposited with the return in the office of the City Inspector."

On reading the above section it would appear that our duty in this matter is clearly defined and easily fulfilled; yet should a certificate be filled out, stating that deceased died of pneumonia, the indirect cause being injury to the chest, such certificate would be at once sent from the City Inspector's Office to the coroner for investigation. The object of pursuing such a course is, for the purpose of ascertaining how far the injury was the result of pure accident, or how far through the carelessness or wilfulness of other parties. It would be a safe rule for us to adopt in all cases where the person has died suddenly, to delay giving a certificate until an opportunity was afforded to examine all the circumstances attending the last moments of the deceased. By doing so we may bring to light some new facts that would make it our duty to assign the whole matter to the proper tribunal for examination; we should also be careful in giving a positive opinion as to the immediate cause of death, for it may happen that a post-mortem examination will reveal the seat of the disease in an organ that we least suspected. Several instances of this kind which came to our notice were the cause of no little unpleasant feeling, both on the part of the medical attendant and, the different members of the family; what was supposed to be heart disease the examination proved to be apoplexy, and *vice versâ*. Mistakes of this kind are in no way different from errors of diagnosis made in every day practice, the only difference being, that the autopsy seldom fails to determine the matter beyond dispute. We may here enumerate the causes of death in which a physician's certificate would be entirely disregarded by the City Inspector's Department. They are as follows:—Accidents of all kinds, no matter how produced, such as falls, blows, bruises, contusions, wounds, fractures, and dislocations. Belonging to the same class might be included burns and scalds. A moment's reflection would be sufficient to convince us, where the cause of death could be referred to any of the above mentioned conditions, an investigation would be necessary and highly proper. To those unaccustomed to such investigations it may seem entirely uncalled for, and would appear to be an intrusion into the private affairs of families, that should be discountenanced and avoided. This is far from being the case. We have had occasion more than once to see the beneficial effects of a coroner's inquest, in procuring testimony, that was afterwards used by the surviving relatives of the deceased, in procuring pecuniary recompense from wealthy corporations. Without the aid of such testimony many poor persons would be unable to make good their claim against the company. Very few physicians would feel justified in giving a certificate in any case where the death was caused by poison, even when taken or administered by accident, and no one could be blamed for the unfortunate result. There is yet another class of cases, in which we should act with great caution: it is where persons are found dead, bearing in mind constantly that we may be duped by designing parties, who are desirous of avoiding any investigation, and wish the matter quietly disposed of. This may occur where a member of a family has committed suicide, or died suddenly by intemperance; and while we decline positively furnishing a certificate, we may counsel and assist the afflicted relatives by addressing a note to the coroner, explaining the circumstance of the case, and requesting him to avoid giving publicity to the affair as far as in his power. Were this course pursued oftener than it is, friends and relations would have less occasion to lament the notoriety that was given to the last act of some dear friend. The common mistake of reporting the death to the nearest station-house is the surest means of spreading far and wide all the particular incidents connected with the case.

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* Chap. X., § 10, Laws Relating to Public Health.

On all occasions of this kind it is desirable to have the inquisition promptly, without delay, having as little display as possible. This can generally be done by following the course just indicated. Several years' observation of the working in the coroner's department has convinced us of the respect and attention paid to communications from medical men. When the family physician is desirous of making the necessary post-mortem examination, a request to that effect is on all occasions readily assented to, and assistance promptly afforded. We have enumerated some of the causes of death, in which a physician would decline furnishing a certificate; the propriety of doing so must be obvious to all on a little reflection. There is another class of causes which should be mentioned in this connexion that are very perplexing, and often a source of no little annoyance, viz. where a suspicion exists, that the person has come to his death through the instrumentality of other parties. Examples of this kind are familiar to most practitioners, where an illegitimate child is said to have died in convulsions or cholera infantum, and we are called upon to give a certificate to that effect; or where an overdose of the "accustomed evening anodyne" has quietly put an end to the sufferings of a patient afflicted with some chronic incurable disease.

It will be our duty under these circumstances to take into consideration all the surroundings of the case, before coming to a positive decision, for it may happen that the suspicion on our part is not well founded, and great injustice may be done to innocent parties by a legal investigation. We have known several instances where unprincipled persons have furnished certificates of death for a small fee, without ever having seen the deceased, or knowing positively that the person was dead, merely trusting to the statements of interested parties. Occurrences of this kind have long since made it incumbent on the City Inspector' Department to carefully examine every certificate before granting a burial permit. We would here call attention to a subject that has been sadly neglected. It is to be regretted very much that we have no well regulated dead-house in this city, like "La Morgue" of Paris, where persons found dead in the streets could be placed for a time until recognised by their friends.

The present state of things bearing on the point is truly lamentable. No provision whatever is made for cases of sudden death occurring throughout the city; a person may die of heart disease on his way home from business, and if not immediately recognised by the bystanders is soon lodged in a lonely cell of the nearest station-house. Here the body is allowed to remain for a very short time, as the Captain of the Precinct is unwilling to have the corpse over night in the station-house if it can be avoided. The coroner is immediately summoned by telegraph to hold an inquest on the body of an unknown person just brought in, with as little delay as possible. This is soon accomplished, and in a short time a permit is made out to inter the body at the city's expense. The relations of the deceased begin to feel uneasy at his prolonged absence from home. Diligent inquiries are made, and a strict search instituted in all directions without avail. At length they are amazed to find that he lies buried in a trench, twenty feet below the surface, in the public burying-ground. It makes one shudder to think how suddenly he may be disposed of, should death overtake him on the public highway, unless the fact comes to the notice of his friends. The policeman who takes the body to the station-house is in a hurry to get rid of his disagreeable duty; the Captain of the Precinct is in a hurry to get the body away from the station-house; the coroner is in a hurry to get through with his part of the business; and the city undertaker is in a hurry to get through before dark. The result of all this is, that the whole affair may be disposed of in a few hours. There is no exaggeration in the picture we have drawn. It is the mode in which the great city of New York disposes of a portion of its dead. We have known instances where two hours had hardly elapsed after the death of a person before the body was coffined and on the road to the public burying-ground. Our Revised Statutes contain no laws regulating the time a body shall be retained, in order that friends may claim it, neither is there any place designated to keep such body, unless it be allowed to remain at the dead-house of Bellevue Hospital. Even here, it can remain only for a brief period. Surely this condition of things should not be allowed to continue. Some effort should be made to remedy this evil by the medical profession. A memorial from the County Medical Society, presented to our State Legislature, might attract some attention from those who are interested in the well-being and prosperity of our city. The passage of a law regulating this matter would be hailed by all classes of citizens as a wise step in the direction of paying proper respect to the dead. The evils arising from the present condition of things are best seen in the case of strangers, who may die while passing through our city. Should they be unaccompanied by friends or attendants, and escape identification only a few hours, it is evident that trouble, mortification, and great expense are entailed on the relatives in endeavoring to recover the body. How easily all this might be avoided, were a proper place so arranged as to keep a corpse at least twenty-four hours before depositing it in the ground. For years past we have been urging this matter on the attention of the proper authorities, but so far with little avail.

We have not referred to false certificates of death, made out by irregular or dishonest practitioners. It is well known that imposters, who boast of curing consumption, never place in the certificate the real cause of death. Phthisis is passed off as chronic bronchitis or lung fever, and the friends of the demised are made to believe that the pulmonary disease was undergoing a cure, but that a new difficulty supervened, which was too much for the patient's strength. Silly people believe all this nonsense and continue to patronize the boastful pretender.

EXPERIENCES IN MILITARY SURGERY.

By DAVID P. SMITH, Surgeon Vols.,

SURGEON IN CHARGE OF FAIRFAX SEMINARY HOSPITAL.

EXSECTION OF KNEE-JOINT.—AMPUTATION AT KNEE-JOINT.

In my remarks I may have seemed to lay too much stress upon my favorite method of amputation below the knee, but one who has seen the enormous fatality following all amputations in the army will not wonder at it. Many causes conspire to render primary amputations the exception and not the rule, and I can assure you the slumbering volcano of Pyæmia, *et id genus omne*, that wait upon every secondary operation, upon soldiers whose nervous systems have been worn down by hard marches and overstrained by the tremendous excitement of a battle-field, and whose vascular systems have had but hard bread for nourishment, must give us pause. Any amount of cut surface, tension, pent up pus, etc., etc., will be endured after a primary amputation, with a favorable result; but not so with secondary operations.

I say emphatically that the advantages which I claim my method alone furnishes must be obtained if recovery is expected to follow. The only cases of recovery in this hospital after secondary amputations have been where this method was adopted. The cases were not selected.

In Fairfax Seminary General Hospital from August 1, 1862, to January 1, 1863, under my charge, we had nine secondary amputations of the leg, two of them following unsuccessful amputations at the ankle. Of these two recovered and seven died. All of these operations were secondary, because the enemy held possession of the battle-field—the second Bull Run—and the wounded were not removed thence until nine or ten days after the contest. This enormous mortality is frightful, but easily accounted for. They had lain a long time on the field, because the retreat of our army had prevented their receiving speedy succor. For the same reason they had received little or no sustenance for a long time after the reception of their injuries.

After amputations of the leg the next operations that claim our attention, and which must be discussed together, because practically they are closely associated, are *exsection of the knee-joint* and *amputation* at the same joint.

Exsection of the Knee-Joint.—I am prepared to utterly discard this operation from the list of operations proper to be performed for gunshot or other *injury*, for this reason, even in civil practice, where every advantage of rest and careful nursing can be had, it is a doubtful remedy. But it is admissible because it is, or should be, always done for *caries*, which should most certainly be considered by every surgeon as imperatively demanding thorough excision as *cancer*. Take this view—and I think I am justified in so doing—and then let us see if a shattered knee-joint should be submitted to the same treatment. Will there not be more hope for safety if the uninjured ligaments are left undisturbed, and merely the loose fragments removed through large depending incisions? Let every fragment be removed, and take care that the incisions traverse the synovial sac to its utmost limits, and I am persuaded that we have done our best. Nature can more readily repair it in that shape, than she can unite the wound left by exsection. By exsection we also destroy all remaining ligaments of the joint, and render necessary the most perfect rest and most perfectly adapted splints.

What do we gain by exsection? Merely the removal of shattered bone, the smoothing off of rough surfaces, and the extirpation of the synovial sac. All this, or its equivalent, is easily done by free longitudinal incisions, and dexterous use of the forceps and gouge. All of the cases, five in number, operated upon in this hospital, did well for from two to six weeks after the operation, and finally sank exhausted from suppuration and with blood-poisoning from the vast pus-producing surfaces.

There are, however, rare cases which may necessitate exsection. The following is a case in point:—About a fortnight after the battle of Pittsburgh Landing, Gen. Thomas's corps, of which I was then Medical Director, in its advance came upon a large rebel hospital, and I was ordered by the General to do what was needful for the wounded, and see that they were sent to the river and placed on transports. I found four Confederate surgeons in charge of them, but they had so neglected their own men that the wounded themselves begged me to see their wounds. Several bad gunshot fractures in and about the knee-joint I amputated forthwith, as a necessary preliminary to transportation. Finally I came to one fair-haired, delicate-featured lad, of about seventeen, with wound of entrance just behind and a little above the outer condyle of the right femur. On introduction of the finger it could not reach the ball, which appeared to be imbedded in the femur between the condyles. The knee-joint was inflamed, and he complained of the slightest motion. I therefore performed circular incision of the skin an inch below the patella, and retracting and dissecting it upwards—rather hastened in it by the sudden occurrence of sharp artillery firing about six hundred yards to the front—divided the bone just as it expands to form the condyles. The ball was a conical one, completely and firmly imbedded between the condyles, and just raising before it the cartilaginous envelope of the bone. This case, which, in view of long and weary transportation, called for amputation, in hospital practice would have been just the case for exsection of lower end of femur. During our advance on Corinth I saw a man who was shot with a Minié bullet directly through the joint from front to rear, chipping off fragments from head of tibia. I removed these, leaving free incisions. During the two weeks I had him under observation he did remarkably well. There was marked improvement after the free incisions were made.

Amputation at the Knee-Joint.—I have had considerable experience in amputation at the knee-joint, both at Mill Springs, Shiloh or the battle of Pittsburgh Landing, and also in this hospital, Fairfax Seminary General Hospital, Va. I give most decided preference to the operation by lateral flaps, which I practised on the cadaver long before this war broke out. I have seen it described nowhere, and so I shall venture to claim it as original:—Two oval lateral flaps are made starting from the centre of the patella, and meeting at a point exactly opposite on the under surface of the limb. These flaps should not be merely semi-circular but *oval*, the length of each flap being from one to two inches greater than the semi-circumference of the limb, and the two flaps to deviate from each other in front at a very acute angle, so that there may be enough integument to cover the swelling condyles. The flaps will embrace merely skin and cellular tissue, no muscular tissue being divided. The popliteal artery will be divided just in the posterior angle of the flaps, and behind the condyles.

A question of plagiarism has arisen between Dr. Tweedie, the author of a recent work on fevers, and Dr. Murchison, a writer on the same subject. The latter charges the former with using his materials without any acknowledgment.

A new hospital for the insane was opened at Dixmont near Pittsburgh, Penn., on the 14th of Nov. It has a farm of 280 acres attached. The site of the building is named in honor of Miss Dix. The Physician is Dr. Wm. A. Reed.

ULCERATION OF THE DUODENUM,

IN SEVERE CASES OF FROST-BITE.

By SAMUEL ADAMS, Assist. Surg. U. S. A.
5th U. S. INFANTRY, ARMY OF THE POTOMAC.

It has been long known, that in cases of severe burns, ulceration of the duodenum occurs in the latter stages, and is accompanied by obstinate diarrhœa and *rapid emaciation.* This fact was first mentioned by Rokitansky, and several times has come under my own observation. I have lately found that the same pathological condition occurs in cases of severe frost-bite. Now, the morbid process going on in the two cases is very similar, and the affection of the skin the same—indeed, all the phenomena the same,—and in a case which died not long since, under my care, I looked for, and found the same condition of the duodenum, which I have observed in cases of severe burns.

The following is the history of the case:—Private Cole, Co. F, 12th U. S. Infantry, aged 36, confined in the guard-house of the Provost-Marshal, under sentence of a court-martial for desertion. He was suffering from acute bronchitis, and I had attended him at the camp; became gradually worse, and was admitted into my hospital-tent December 21, 1862. After coming into hospital, complained that his feet pained him, and on examination I found both feet had been frozen above the ankles. Reaction had come on, and gangrene already set in. I had heard nothing of this before. After being in hospital a week, *diarrhœa set in*, and *emaciation became very rapid*, notwithstanding the patient's appetite remained good, and he *ate heartily.*

The line of demarkation and separation was formed, but the patient had become too weak to bear an operation, and the separation was left to nature, while an effort was made to bring the patient up to the point where he would bear an operation, by good diet and stimulants. The patient gradually grew worse, and died after three weeks, January 12, 1863.

Autopsy twelve hours after death.—The important point of the autopsy was the ulceration of the duodenum. The mucous membrane was covered with small, irregular, elliptical ulcers, with rough, serrated edges, and extending in different directions.

The condition of the duodenum explained the *rapid emaciation*, as the important function of chylification was interfered with, and the nutritious pabulum of digestion prevented from entering the blood.

It would be a beautiful point in pathology—if it can be established—to know that the same pathological lesion occurs in these two affections, which present so many similar phenomena.

* * *

WOUND OF POSTERIOR TIBIAL ARTERY.

SECONDARY HÆMORRHAGE—LIGATION OF ARTERY—DEATH—CASE OF COL. MATHESON.

By W. B. LITTLE, M.D.
SURGEON 82D REGIMENT, NEW YORK VOLS.

Colonel Roderick Matheson, commanding the 1st California Regiment, or 32d Regt. N.Y.S. Vols., was wounded in the battle of Crampton Gap, Md., Sept. 14, 1862, the ball passing through the calf of the right leg, fracturing the fibula in its course.

The wound was treated with cold water dressings. Six days after the wound was received a slight hæmorrhage of dark blood occurred, and again two days after it was re-repeated; the whole amount lost at both bleedings did not exceed four fluid ounces. No further bleeding took place until the 17th day, when a more profuse hæmorrhage occurred, the quantity lost not exceeding one pint, not being sufficient to induce syncope. The next day, chloroform having been administered, the coagulum was removed; considerable hæmorrhage followed, coming, as was soon ascertained, from the posterior tibial artery. It was now determined to enlarge the wound and tie the artery, which operation was accordingly performed. On reaching the artery it was found not divided, but a portion of one side, to the extent of nearly an inch, was carried away; a ligature was placed both above and below the wound in the artery, a few pieces of bone removed from the fractured fibula, and the patient placed in bed. Symptoms of great prostration being present every effort was made to rally him, but without avail. He lived but a few hours after the operation was completed.

The position held by Col. Matheson, not only as a brave and accomplished military officer but likewise being a prominent citizen of California, and having extensive connexions in New York, gave a painful prominence to the unfortunate result in his case, and, as usual, the course of treatment adopted by the surgeons in charge has been the subject of severe criticism, both in and out of the profession.

Among the many embarrassing positions in which the surgeon finds himself placed, there is none more so than when, as in the case of Colonel Matheson, he is required to avoid, on the one hand, a weak and inefficient course of treatment, and on the other, a too officious and meddlesome interference. Does the course pursued in the present instance partake of either of these characteristics? During the first six days cold water dressings were applied; then a slight hæmorrhage of dark blood occurs, followed two days afterwards by another, of a similar character, the whole amount lost not exceeding four ounces. During the next eleven days, there was no bleeding. Now, up to this period of time, would any judicious surgeon have deemed it his duty to ligate the posterior tibial artery? Was there any evidence, even, that this artery was wounded at all? Was it not more probable that some smaller branch was involved?

The occurrence of the severe hæmorrhage on the 1st of October made the necessity of surgical interference palpable, and it was accordingly rendered on the succeeding day. The operation was skilfully performed; it was commenced by Dr. Geo. Burr, surgeon U.S. Vols., and completed by Dr. Du Bois, asst. surgeon U.S.A., in the presence of surgeons Robinson, Janes, and myself. The chloroform was very carefully administered, the precaution being taken to stimulate the patient previous to its inhalation.

The medical treatment was very plain, combining tonics and opiates. The previous health of Col. M. had not been good during the campaign on the peninsula at Harrison's Landing, and after returning to Alexandria he had suffered from diarrhœa, from the effect of which he was more or less enfeebled at the time of receiving the wound.

Throughout the whole course of treatment I had the daily advice and counsel of Surgeon Burr, and I also called in consultation surgeon Henry S. Hewit, U.S. Vols.; (then stationed at Frederick City) after the second slight hæmorrhage occurred (on the eighth day).

It may not be improper for me to add that the most friendly relations existed between Col. Matheson and myself; we were old Californians, and I naturally felt a peculiar solicitude in his case. I was almost constantly in attendance, and was present in the room when all the hæmorrhages occurred.

* * *

Dr. Heller, in *Wien. Med. Wochenschrift*, gives the following analysis of the urine of a lad six years old, who died of hydrophobia. The quantity operated on was about one pound. Its specific gravity was 1036, and very acid. The sediment consisted of uric acid, and was in greater abundance than Dr. Heller had ever met with. No urate of ammonia was found in the sediment. Of albumen, and of carbonate of ammonia, there was only a trace. It contained no sugar. The uropheine and uroxanthine were slightly increased. In the clear urine was also contained much uric acid. The urea was greatly increased, and was equal in quantity to what is met with in meningitis. The chlorides were very slightly diminished; the sulphate greatly increased. The earthy phosphates were much, and the alkaline phosphates slightly, increased.—*Brit. Jour.*

Reports of Hospitals.

BELLEVUE HOSPITAL.

THE DIARRHŒA OF SOLDIERS

By HENRY W. COOKE, M.D., HOUSE PHYSICIAN.

The following case involves most of the points of interest connected with this variety of chronic diarrhœa:—

Nicholas Johnson, American, from Penn., 25 years old, of large size, well developed, and healthy, having no hereditary predisposition to disease, says, that while in front of Richmond, in July last, he was attacked with a mild diarrhœa, the evacuations varying in number from six to nine in the day, of a yellowish fæcal color, thin and muco-serous in character, without blood and without pain. At this time he was subject to the hygienic influences incident to the soldier in camp. The ground upon which he was encamped was situated upon a fertile but low plain, the soil of which was of a sandy, approaching to a clay, character. The water, derived as it was from very shallow wells, or pits, dug as occasion required, was of a clay color, warm, and disagreeable in taste, and in many instances stagnant. The rations at this time were regularly served, consisting usually of salt meats, crackers, and pressed vegetables. After remaining two or three weeks in his quarters he was transferred to the general hospital at Harrison's Landing, where he remained for five weeks, the diarrhœa still continuing active, and gradually reducing his flesh and strength. From here he was again transferred to Fortress Monroe, where he remained in the same condition for four weeks, gradually failing in strength, the diarrhœa possessing the same characters as at first; during all of this period he had no benefit from treatment.

On admittance into Bellevue Hospital, Oct. 3d, his condition is one of extreme emaciation: the features haggard; the eyes sunken; the conjunctiva red and congested; the surface dry and rough; the hair dry and crisp; the tongue red and shining, but moist; the throat dry, rendering the voice feeble and husky, approaching the choleric. Has no indication of thoracic disease. The pulse full and weak, 85 per minute; the capillary circulation excessively sluggish, especially of the hands, which have a dark venous appearance—the blood returning slowly when pressed from beneath the finger; the appetite morbidly acute; complains of abdominal pains after eating; has no tenderness on severe pressure. The evacuations vary in number, from six to eight in the day, of a muco-serous character, yellowish in color, without any trace of blood or pus, and without fetor. Urine not examined.

He was ordered a restricted diet of milk, soft boiled eggs, crackers, and baked fruit, with whiskey 8 ℥. per day. Also,, ℞. Liq. ferri pernitratis, ʒ ii; sol. sulph. morph. U. S. ℥ ii., one drachm every four hours.

He was also ordered cod-liver oil, which he was unable to use.

Oct 6th. The patient is slightly recovered from the frequency of his evacuations, but resists the restrictions upon his diet, and partakes quite freely of fruits, sweetmeats, etc., which have produced more or less loss of appetite, with vomiting.

Ordered soda bi-carb. and acidum tartaricum in effervescing draughts; other treatment continued.

Oct. 9. Patient continues his irregularities, and vomits quite frequently; complains of supra-orbital pain; the eyes are quite red and inflamed; ordered cold lotions; other treatment continued.

Oct. 12. The patient more mindful of his diet; is improving; vomiting has nearly ceased; eyes still painful and inflamed. The tongue moist, but red and shining; pulse 80 per minute, feeble; evacuations vary from three to five in the day.

Ordered sulph. quinine, two grains, three times per day; other treatment continued.

Oct. 17. Patient continues to improve. An examination of the urine reveals no indication of Bright's disease of the kidney.

Oct. 19. Patient has been unmindful of his diet, and has vomiting.

Ordered effervescing draught.

Oct. 21. Vomiting continues, patient much worse, diarrhœa active, six to nine evacuations per day. Ordered acidum hydrocyanicum. gtt. v every four hours.

Oct. 22. Patient is sinking rapidly; the eyes very sunken, red, and painful; the cornea of the left eye presents some indication of strangling; the tongue very dry and red; the pulse very feeble, 95 per minute; vomits all his food; has had but a single evacuation in 24 hours. Patient died the following day exhausted.

Sectio Cadaveris. eighteen hours after Death.—Body excessively emaciated; eyes congested; cornea of left eye presenting a small sloughing ulcer on lower margin. Head not examined. Thoracic organs, stomach, liver and spleen were healthy. Duodenum and upper portions of jejunum healthy; lower portion presented more or less tracts of congestion. The whole length of the ilium presented tracts of intense congestion, with points of extravasation of variable size and intensity. Peyer's patches were enlarged, raised, and thickened, presenting a grey appearance, with innumerable minute black points, each of which seemed to mark the situation of a diseased glandule.

The mesenteric glands enlarged and prominent. The large intestine presented tracts of intense congestion, with slight extravasation at irregular intervals throughout its entire length, the lower portion and rectum presented some fibrinous exudation. There was no ulceration.

The kidneys were moderately enlarged, weighing three-and a-half oz.; their color slightly changed, lighter than natural, the vascularity not changed.

On section the proportion between the secreting and tubular structures but very slightly modified. The cut surface granular, and of a lighter color than natural. The microscopic examination revealed a granular condition of the epithelium lining, the tubes which had in many instances become detached closing them entirely. There was no excess of fibrinous matter demonstrated.

In this, as in the majority of cases, patients refer the cause of their diarrhœas to the continued use of unwholesome water; although there is no demonstrable evidence of this, yet in the absence of any other so general cause this may be considered as the chief: of necessity, individual instances of exposure to cold, irregularities of diet, etc., are here not considered. In almost all instances this disease commences mildly, the evacuations thin, muco-serous in character, mixed with more or less fæcal matter, but without blood; although this is not always the case, the proportion in which this disease has commenced, with active dysenteric evacuations with pain, is about one in five. Usually, however, the diarrhœa commences gradually. The patient, not feeling unwell, is constantly harassed with a desire to evacuate the bowels; this continues for one or two weeks, in the majority of cases, when the strength becomes so much exhausted that active duty has to be suspended; from this the patient gradually loses flesh and strength, the evacuations possessing the same general character, varying in number from seven to twelve in the day without pain or other indication of severity. After the expiration of four or eight weeks (as the case may be) the emaciation becomes extreme; the eyes sunken, red and congested, and painful; the cornea especially in the worse instances becoming sloughy and ulcerated, the surface dry and rough, the hair dry and crisp. The natural heat is diminished, and the patient complains of being cold, the hands and feet are cold. The tongue becomes red and shining, but not dry, except in the fatal cases; the throat somewhat dry, the voice feeble and husky resembling the choleric. The appetite is seldom lost, but on the contrary is morbidly keen until a short time previous to death, when the patient refuses his food altogether. The number of evacuations varies from six to twelve in 24 hours; they are usually more frequent at night than in the day, of a muco-serous character, with more or less fæcal matter, not fetid, and without blood or pus: in the fatal cases the diarrhœa invariably ceases one or two days before death. The pulse very feeble, is seldom increased in frequency in the uncomplicated cases, the capillary circulation is extremely sluggish, in rare instances amounting to almost complete stagnation over the entire surface of the body; usually, however, the extremities only present this appearance. This condition continues for a longer or shorter period, when suddenly the diarrhœa ceases, the patient loses his appetite, the tongue becomes dry, and the patient dies exhausted.

In the severer cases, where recovery takes place, it is slow and interrupted, the diarrhœa, on any irregularity of diet, readily returning to retard the progress of the patient. A certain large proportion of recoveries are still further complicated, and retarded by the supervision of Bright's disease of the kidney. Two or three cases in five are thus complicated, there is more or less œdema of the limbs and failure to recover from the previous loss of flesh and strength. The urine is not albuminous, but presents numerous casts of the tubuli uriniferi.

The mortality from this disease has been very great; of one hundred and thirty-two cases received on the third and fifth of October, forty-five or thirty-four per cent. have proved fatal. The treatment of this disease has thus far involved two indications: a proper regulation of diet, and measures remedial to control the frequency of the evacuations. The former indication has been more or less successfully accomplished by the use of eggs, milk, and bread or crackers with the milder stewed fruits. Beefsteak, as a rule, has proved injurious. To meet the latter indication, the stronger astringents with opium, or bismuth with opium, either by the mouth or in large doses as enemata; nux vomica, Fowler's solution of arsenite of pot., etc., but in almost every instance in which remedies were used to the exclusion of some of the forms of opium, the treatment has been found unsuccessful. Astringent enemata of the liq. ferri persulphatis, largely combined with sulph. morphine, have occasionally given relief when all other means have failed.

The lesions of this disease are interesting and peculiar. In every instance the cadaver has presented the extremest emaciation, the integument dry and wrinkled, the capillaries, especially of the hands, passively congested; in a single instance this condition involved the whole surface; the eyes sunken, the conjunctivæ congested, and in a few instances inflamed; the corneæ of the left eye, in four instances, presented a distinctly sloughing ulcer upon their lower margin, extending deeply into, but in no instance involving, all of the coats so as to evacuate the contents of the anterior chamber.

Of the seventeen instances in which we have conducted or witnessed the post-mortem examination, the thoracic organs have almost invariably been found healthy, the smallest amount of tubercular deposit being found in two cases. The stomach, liver, and spleen healthy, with only one exception, in which the liver was slightly bronzed and the spleen very moderately enlarged from malarial causes. The liver has, in two instances, presented very slight indications of fatty degeneration. The duodenum and upper portion of the jejunum have usually been healthy, occasionally more or less congested. The inferior portion of the jejunum and all the ilium have, without exception, presented tracts of congestion at irregular intervals, varying in number and intensity; frequently points of extravasation were presented, but never of ulceration. Peyer's glands have been found invariably enlarged and thickened, of a grey color, the free surface presenting innumerable minute black points, each of which appeared to mark the situation of a diseased glandule. The mesenteric glands have, without exception, been found enlarged and prominent.

The lesions of the large intestines have been either those of congestion with varying degrees of extravasation or of ulceration, more or less extensive. The colon in the former cases has invariably presented patches of intense congestion, and in numerous instances extravasation, the amount and intensity varying in different subjects; in a few, the whole mucous surface of the intestine having a livid red color, in others, tracts of more or less intense congestion, at irregular intervals, as in the small intestines, would be noticed. The ilio-cœcal valve almost invariably presented intense congestion.

The rectum has uniformly presented intense congestion, with more or less fibrinous exudation. Frequently the presence of fibrinous exudation was a question of doubt. In those cases in which ulceration has been present, the same condition of congestion has been found, the ulcers being superadded. The amount of ulceration varies in different cases. In a few the ulcers have been sparsely scattered through the whole length of the large intestine, situated upon a more or less congested groundwork, the mucous membrane not otherwise perceptibly changed. In other cases the ulcers have been more numerous, the mucous membrane thickened, the color varying from a livid red to a dark grey, the surface granular and disorganized, the ulcers varying in size from one to three or four lines in diameter. Often fibrinous exudation has been abundant; occasionally cicatrices of old ulcers have been found more or less numerous. As a rule the ulcers have been found mostly confined to the rectum, a few only being found in the descending colon and about the ilio-cœcal valve. Of the seventeen examinations made, seen more or less freely ulcerated, the remaining ten presented no ulcers.

The kidneys in this disease have, without a single exception, been found diseased; a few very markedly so. Their color somewhat lighter than natural, the weight as a rule increased, the extremes being three and a half in the smallest and six and a half ounces in the largest, the vascularity not greatly changed. The longitudinal section revealing more or less disproportion between the secreting and tubular structures, the cut surface usually lighter in color than natural, and having a granular appearance. The microscope revealed uniformly a granular condition of the epithelium lining the tubuli uriniferi, which was readily detached, and occluding the tubules to a greater or less extent. In only one instance was there any excess of fibrous material demonstrable, the kidney weighing only three and a half ounces; in this, however, the excess was very slight. This condition of the kidney, as a rule, is indicated by the presence of casts in the urine previous to death. Albumen is not present.

The sympathetic ganglia have in one or two instances been examined, but without result.

Reports of Societies.

NEW YORK COUNTY MEDICAL SOCIETY.

STATED MEETING, Feb. 2, 1868.

ALFRED UNDERHILL, M.D., PRESIDENT, IN THE CHAIR.

(Reported by GUIDO FURMAN, M.D., Secretary.)

THE following gentlemen were admitted to membership since the last meeting:—Edmund R. Peaslee, A.M., M.D., LL.D., John Messenger, M.D., and Robert Alex. Barry, A.M., M.D.

DR. CONANT presented an apparatus for generating, washing, condensing, and using carbonic acid gas, consisting of two very strong glass globes covered with iron wirework to strengthen them. These globes were so constructed that they could be screwed together for use. Into the lower globe was placed some bi-carbonate of soda and crystals of tartaric acid; the upper globe was the recipient of a small quantity of water, a glass ball valve preventing the water from running into the lower globe when screwed together. By turning both, a small quantity of water escaped through the opening and dissolved the alkali and acid in the lower globe, the tartrate of soda being formed, and the carbonic acid gas set free, which rises and passes through the water into the upper globe, it being washed while passing through the water and condensed in both globes. Rising above the water in the upper globe is a small glass tube which connects with a stopcock, upon the under side of which is a safety valve, which prevents the apparatus from being blown to atoms. Upon the other side is also a stopcock, which if turned admits the drawing off of the water found in the same globe, charged under pressure with carbonic acid gas. By means of an India-rubber connecting tube, the gas is drawn off into India-rubber bags, and thus becomes portable for use. As appendages to the bags Dr. C. had an instrument attached for using and confining the gas in the vagina and uterus, and for conveying it into the urethra and urinary bladder of both sexes.

Dr. C. has up to the present time used the gas some two hundred times, but is not fully ready to report its effects; though in some cases it has had a magical effect, while in others the effects have been negative.

Dr. Isaac E. Taylor related the history, treatment, and recovery of the following case of procidentia uteri, illustrated with a diagram. The patient, a married woman, aged sixty-nine years, entered the Island Hospital (Blackwell's Island) the middle of December, 1862. She has given birth to ten children, with easy labors. The uterus was in a prolapsed condition for twenty years, and the procidentia of that organ existed for fifteen years, following the prolapsus. The uterus was extremely large, the cervix uteri measuring three inches in diameter and nine inches in circumference, being vascular and tender on pressure. The measurement of the cavity of the uterus from the os tincæ to the fundus was three and a half inches. The uterus was returned after a few moments, and pushed as high up as it was practicable. It has retained this position ever since, which is now over six weeks. On an examination made Feb. 2, 1863, it was reduced to its normal dimensions, with no ulceration existing.

Dr. Worster presented the model of a tourniquet, with an improvement by Clinton Roosevelt. Dr. W. claims for this improvement that it relieves the veins from pressure, while there may be a firm compression kept up on the artery. It consists of a thin steel spring, raising the strap that encircles the limb, and thereby relieving the veins from pressure. A second variety consists of a steel spring, a segment of a circle, which he claims to be equally valuable in relieving the pressure on the veins, and more portable; either, however, may be carried in the pocket without much inconvenience.

FOREIGN CORRESPONDENCE.

LETTER XXVI.

THE GOAT'S WHEY TREATMENT.

By PROF. CHARLES A. LEE.

Baden-Baden, Sept. 19, 1862.

In travelling in Switzerland one meets with all kinds of tourists—muscular Englishmen, bent on climbing the highest and most difficult Alps, to boast when they get home of what they have accomplished; French and Germans, who are not so ambitious of fame in this line, but who are very willing to enjoy fine views, if not at too great expense and labour; Poles, Russians, Swedes, Americans, men of many countries and both continents, all in pursuit of the sublime and beautiful, and ready to encounter anything reasonable in the way of danger and hardship if they can only see what the whole world has pronounced the finest and most magnificent scenery in Europe; lastly, there is a class of *invalids*—people not really sick or well, but who have been told by their physicians, who doubtless wished to be relieved from hearing their complaints for a season, that they must try the healthy mountain air of Switzerland, and in the mean time, perhaps, see what the *whey* or *grape cure* (*cure de petit lait, cure de raisin*) will do for them. These come in admirably in place of homœopathic globules to amuse the imagination and inspire hope, while nature, aided by travel, new scenes, new objects, and change of air, perfects the cure. Perhaps, however, I do these simple modes of treatment injustice; it does not necessarily follow, I admit, because they are now fashionable and in great repute among the English nobility and the wealthier classes, that they are a humbug—this doubtless furnishes strong presumptive evidence, but we must not judge rashly; *goat's whey* is older than Hahnemann and grapes date back at least as far as the age of Noah. Besides, old Pliny recommends goat's milk as most medicinal and agreeable to the stomach, because, he says, this animal feeds more on leaves and herbs than grass. He goes on, moreover, if I rightly recollect, to recommend all patients laboring under pulmonary affections to confine themselves to a strictly milk diet, though he thinks that the milk of the *sow* is on the whole the best for such cases. We know, moreover, that the ancients not only used milk as a dietetic, hygienic agent, but also as a lotion, and for baths. Does not Pliny tell us that ape's milk will remove wrinkles from the face, and make the skin whiter and more delicate? and that certain ladies sponge themselves with it seven hundred times a day, being very particular to observe the exact number. We read, also, that those renowned coquettes, Cleopatra, Phryne, and Aspasia, kept themselves from growing old by baths in milk, simple or medicated. In short, did not the famous Poppea keep five hundred she-apes, which she fed on aromatic herbs, and took along with her in her travels, that she might bathe and wash in the same health-preserving, time-defying fluid?

But though, in modern days, milk-baths have fallen into desuetude, yet milk, deprived of its caseine, has taken its place, and in Switzerland, especially, has taken rank as an important medicinal agent. There are many celebrated goat-whey establishments in the country, which, like mineral springs, are under the control of medical men, who make it a specialty, and prescribe it as one of the most important modes of cure hitherto discovered!

It is now about sixty years since the *goat-whey treatment* came into vogue in Switzerland, in consequence, it is said, of the recovery of some high personage under its use, and after having been given over by the profession. This was at Gais, one of the highest of the Appenzell Alps. Gais is the most celebrated place for this mode of practice at the present time, although I found establishments at Interlaken and several other places. There are but three other villages in all Switzerland more elevated, it being over 3000 feet above the level of the sea. There are quite a number of hotels and boarding-houses for the accommodation of patients, and many lodge in private houses. Much credit is given to the vivifying effect of the air, which is dry, very much rarefied, and remarkably pure. The inhabitants have such a dread of vitiated air that they do not till the soil, but leave it in pasturage, for fear that some injurious emanations may escape from disturbing it. There are several other establishments within the radius of a few miles, all celebrated for this mode of treatment, viz. Gonthen, Urnasch, Heiden, Heinrichsbad, and Weissbad. Those who require a less rarefied air generally resort to the latter, which is situated in a narrow, deep valley, surrounded on every side by high mountains. There is also an establishment at Horn, near Rorschach, quite celebrated, which is supplied with warm fresh whey every morning from the Appenzell Alps. From this place the tourist enjoys a magnificent view of the Lake of Constance. During the day the goats climb to the very summit of the mountains, browsing upon the plants which grow up to the foot of the glaciers, and also upon the resinous leaves and twigs which fall from the fir-trees. At six o'clock they are driven to the village to be milked, when the milk is at once subjected to the process of separating the caseine. This is generally done as follows:—The milk is turned into a large copper cauldron, suspended over the hearth on a movable crane. When the temperature reaches about 86° Fah. it is removed from the fire, and a little rennet added, agitating it constantly. As soon as coagulation takes place the caseine is separated by the hand, or a branch of fir, in order to reduce it to a pulpy mass, when the fluid is again placed over the fire. This process is several times repeated, until all the caseine is precipitated to the bottom of the vessel, which requires about two hours. It is then elevated on a sieve, and being placed in moulds is subjected to pressure, till all the serum is separated, when it is afterwards subjected to other manipulations. The porters immediately fill their casks with the whey, and, swinging them over their shoulders, carry it, while yet warm, to the different establishments where it is wanted.

Goat's whey, thus prepared, has a greenish tint, and is somewhat opaque or milky from the small particles of caseum which have not been entirely separated by the process. It has a sweetish, balsamic taste, and an agreeable flavor. In fact, its sensible properties are very different from the goat's whey which is offered for sale in London and Paris, and there can be no doubt that its therapeutical effects also differ in a considerable degree. Its chemical composition may be said to consist of a solution of sugar, lactic acid, and an animal extractive matter, made up of osmazome and different salts. The predominant element would seem to be sugar. The relative proportion of caseine and sugar differs considerably, as is well known, in the milk of different species of animals. The salts consist of the chlorides of potassium and sodium, sulphate of soda, and the phosphate of carbonate of lime. Ass's milk contains a less proportion of salts than any other, while, on the contrary, goat's milk has a larger quantity of sugar. The whey is generally drunk warm, between six and eight o'clock in the morning. It is taken pure, and to the extent of seven or eight ordinary sized tumblerfuls. The patients are directed to walk about for several minutes between each cup. This is believed to aid in its digestion and assimilation, and more speedily bring on the other desired results. Between the third and fourth cup a serous diarrhœa is said to come on, accompanied with borborygmi, without colic or tenesmus, and an hour after the last dose it is usually terminated. The patient then swallows some farinaceous soup, to counteract any further laxative effect. It is very rare that there are any more alvine discharges for the next twenty-four hours. After a few days the tongue becomes white and the mouth clammy, and there is more or less constipation, for which a mixture of equal parts of sugar, rhubarb, and cream of tartar is given, which acts as a gentle laxative. Some of the patients also take baths of goat's and cow's milk, which are said to have a very beneficial effect in cases where the skin is hot and dry, the pulse frequent, and the nervous system irritable. Physicians who follow this specialty speak very enthusiastically of the great cures effected by the treatment, and explain the effects from the influence exerted over the secretions and excretions, and the corresponding modification of the humors or animal fluids. In scrofulous affections, of children especially, the effects are said to be wonderful. They tell us that there exists the same difference in the blood of scrofulous and healthy persons, as there is in *colostrum* or newly secreted milk and that when fully matured, and that goat's whey restores to the blood the globules or constituents which it lacks. This seems to be very probable, at least, as we know that the strength or feebleness of the body either depends very much on the composition of the blood, or bears a certain relation to the elements entering into it. There are two classes of disease for which this treatment is specially recommended, viz. those of the chest and bowels. I think that by far the largest proportion of cases that resort to these establishments are those of bronchitis, chronic laryngitis, bronchial catarrh, and tubercular affections. In a large majority the symptoms are said to be very speedily modified; as the cough, expectoration, dyspnœa, and night-sweats, which are either diminished or totally cease unless there is extensive organic pulmonic disease. But there will be always this difficulty in forming a just appreciation of the value of this treatment in these Alpine establishments, viz. to discriminate between the special and direct action of the goat's whey and the atmospheric and climatic influences. Both, doubtless, have their effect; and when we consider that both incipient goitre and cretinism, if not scrofula, may be arrested, and even cured, by removing the patient from the low valleys to high elevations among the Alps, we shall hardly be willing to admit that the goat's whey plays the most important rôle in these cases. In habitual torpor and constipation of the bowels there can be little doubt but that this special treatment effects good results. The immediate contact of this bland, mildly stimulating fluid upon the mucous membrane of the intestinal canal produces a constant depurating effect, which tends to disgorge the viscera, and favorably modify their activity. It is the uniform testimony of the patients, moreover, that one constant effect of the treatment is to increase the appetite and favor nutrition. The duration of this special treatment averages probably three or four weeks, though in many cases it is much longer. It is not uncommon at the mineral springs to associate the use of the goat's whey with that of the waters, especially here in Germany. The custom is, for several days, to mix equal parts of whey and mineral water together, and afterwards one-third or one-fourth, till, at last, the whey is taken pure, and is continued for a longer or shorter time according to circumstances. The commencement of summer is considered the most favorable time to begin this treatment. The milk is most abundant in the spring, but then it is less sapid, as the sun has not yet sufficiently developed in plants the juices and peculiar proximate principles which impart to milk its therapeutic properties. Much importance is very justly attached to the locality where this treatment is to be tried. All must admit that the quality of the whey must depend, of course, on that of the milk; and milk cannot be healthy and pure where the nourishment and mode of life are not conformable to the nature of the animal. Thus, cows and goats which are confined in close stables and in large cities, necessarily deprived of pure air and fed on unnatural food, die, for the most part, of tubercular disease. We can certainly draw no safe conclusions from the use of whey obtained from the unhealthy milk of such animals, for it has no analogy with that derived from those which range and browse on the mountains of Switzerland. The establishment at Appenzell is generally preferred to the others above named, for the reasons already stated, although good results are observed at Righi, Interlaken, Kreutz, Weissenstein, etc., etc. The goat's whey establishments of Germany, not being so favorably situated, do not enjoy so high a reputation as those of Switzerland. The most important are those of Baden-Baden, Badenweiler, Rehburgh, Rosenau, Schlangenbad, Gleisweiler, Ischl, Neuhaus, Gleichenberg, Minden, Botzen, and Meron in the Tyrol. The last is especially celebrated.

I have gone more fully into this subject than I had intended when I began, and I have thus no space left to speak of the *grape cure*, which now competes with the *whey cure* in public esteem and patronage. It is certainly a matter of rejoicing to every rational and philanthropic mind that these two modes of treatment, simple as they are, have so completely displaced *homœopathy* on the Continent that one rarely hears the word even mentioned. The name even is now synonymous with *quackery* over all France, Switzerland, and Germany, at least, as it should be everywhere. Did I think that goat whey and grape cure establishments would eradicate this baneful pest from our own land, I should be tempted to spend the rest of my days in proclaiming their superiority.

Curability of Insanity in India.—In the four native asylums of Bengal 929 patients were under treatment last year. Of these, 277 were cured or transferred to their friends, and 117 died.—*Brit. Med. Jour.*

American Medical Times.

SATURDAY, FEBRUARY 28, 1863.

THE OLD AGE OF MEDICAL MEN.

A Surgeon of this city once remarked, very shrewdly, that "few medical men grow old gracefully." The remark, doubtless, had reference to the pertinacity with which our elder brethren cling to business, and to those public positions which they have ceased to fill creditably. This fact has, doubtless, the greatest significance to the aspiring young practitioner. As he plods along his wearisome way to make his single daily visit, and that too, often to a charity patient, he conceives the greatest contempt for the grasping ambition of the white-haired septuagenarian who dashes past, over roads which he has travelled half a century, to the families of the wealthy. But in the eyes of all men his position is not enviable who, crowned with wealth and honor, toils on, as does many a medical man, unmindful of the shadows of the evening which are gathering thickly about him.

The question is occasionally asked by members of other professions, "At what age do medical men retire from active life?" The only answer which can be given is, "at that age at which death overtakes them." If it is honorable to die with the harness on, without a moment's interval in which to compose the mind for the great and eternal change, our profession is, of all others, the most worthy of the distinction. Seldom do we have an example of a successful physician who has retired voluntarily from his business with health and faculties unimpaired. Medical men there are in retirement, but they have not sought seclusion from a philosophical view of the amenities of age, but because they could no longer pursue their avocations. Unless some unlucky accident or unfortunate cerebral attack so far destroy their powers of locomotion, as to render their visits to their patients positively objectionable, our older brethren pursue their daily and even nightly duties far past the period of life at which men in other employments seek the repose which is generally grateful to old age. In the hot strife for business we meet the veteran side by side with the graduate, fresh from the schools. No toil or sacrifice of personal comfort can induce him to relax an effort to maintain his hold upon his families, or to enlarge the circle of his practice. If we pass from the circle of private to the more responsible duties of public practice, we find medical men who have passed the period at which the mental and physical powers begin to decline, still occupying stations which they have long ceased to honor. In many hospitals there are medical attendants, infirm with age, clinging, with a grasp that only death will loose, to positions which demand the activity and efficiency of middle life.

The question will doubtless be asked: "At what age should a medical man retire from the practical duties of his profession?" We would give, as a general answer—"When he ceases to improve his knowledge of medicine by study and personal investigation and observation." The practitioner who has reached that age at which, in his own estimation, he requires no further light, and discards the teachings of contemporary science, should retire to the shades of private life. He may continue a respectable practitioner, but he does not do full justice to his patients. Unfortunately, this is the precise age at which all physicians believe that they are most competent. They now rely upon their experience and grey hairs, the latter being often the more valuable of the two. If a physician who has passed into his dotage is unfit to practise his profession, how much more unfit is he to instruct the rising generation of practitioners? It is little less than madness to allow such persons to fill important chairs in medical colleges. The pupil must subsequently unlearn all that he has learned from such sources before he can become a successful student of the medical sciences.

It is not to be denied that medical men may continue to improve in their profession to a great age. There are striking examples in history of men who, though far advanced in life, became proficients in various kinds of learning. And, in our own profession, Brodie in England, and Mott in this country, are pleasing exceptions to the general rule, that medical men early cease to advance with the science they are called upon to apply to daily practice. But nevertheless, it is true, that the vast majority of physicians cease to learn after the age of sixty or sixty-five, and too frequently begin to ridicule all recent discoveries.

The conclusions which are to be drawn from the foregoing reflections are: 1. Medical men do not retire from business at a sufficiently early age. They are too much disposed to struggle to maintain a practice, when they have actually ceased to be competent practitioners. In general a physician at sixty-five is never as correct a practitioner as at forty, and thereafter he rapidly degenerates with advancing age. 2. Old Medical men should not retain public positions. In France a physician or surgeon is compelled to withdraw from hospital practice at sixty. This is a most righteous regulation, and should be enforced in every hospital. Aside from their incompetence the old men do great injustice by retaining these places long after they have ceased to be benefited, to the young, who have time and talents to improve the advantage of hospital practice. And finally, it is most to be regretted that our schools retain men in their professorships, who are representatives of past ages. We may daily hear the theories of a former century discussed by these antiquated teachers with the utmost earnestness and precision. In some medical schools the surgery, midwifery practice, and therapeutics taught, belong to the last half of the eighteenth century.

The reform which is required is practicable, and we hope some day to see it established. Age and decrepitude should not be tolerated in those responsible positions which demand youthful vigor and strength. Medical senility, resting under the shadow of a great name, sits in many a high place from which it should be cast out, to give place to those who represent contemporary medical science. In our medical schools the fact is, perhaps, still more apparent that medical men seldom grow old gracefully. Many chairs are retained by professors who have long ceased to keep progress with the advance of the medical sciences. They inculcate theories which have been discarded, and reject with all the vigor of incredulous senility the recent demonstrations of science.

THE WEEK:

We notice that the Bill creating a Commissioner of Lunacy is making progress in the Legislature of this State. We must again call the attention of those who are interested in this measure to the necessity of having at least three Commissioners. It is quite impossible for one person to discharge the duties of this office, be his capacity however great. With a full commission of capable men a vast amount of good will follow the enactment of this Bill into a law.

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The reports from the army before Vicksburg show a great amount of sickness among the troops, and a larger mortality. Much of the sickness is due to exposure; the camping grounds are unfavorable, and the hospital accommodations poor and insufficient. We are glad to notice that Dr. S. H. Hewit, Surgeon Vols., formerly Medical Director of Gen. Grant's Division, has been ordered to Vicksburg. He is a most efficient medical officer, and will do much to remedy whatever evils may exist in his department.

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At a recent trial in this city of a milkman for adulterating his milk with water, the defendant's counsel maintained that by the addition of water milk was not adulterated. The court decided accordingly, and the retailer of "Pure Country Milk" returned to his occupation well satisfied with the license which he now had to impose upon his customers. It seems, however, that in London, water added to milk is considered an adulteration. Dr. Letheby, the analyst under the Adulteration of Food Act, recently examined a specimen of milk and found one-third water. The dealer only escaped punishment by proving that he did not add the water.

Reviews.

The Hospital Steward's Manual; for the Instruction of Hospital Stewards, Ward-masters, and Attendants, in their several duties. Prepared in strict accordance with existing regulations and the customs of service in the armies of the United States of America, and rendered authoritative by order of the Surgeon-General. By Joseph Janiver Woodward, M.D., Asst.-Surg. U.S.A. Philadelphia: J. B. Lippincott & Co. 1862. pp. 324.

This work is a complete guide to the internal arrangement and management of military hospitals. It gives in detail the duties of the hospital steward, hospital attendants, ward-masters, etc.; the general discipline, police, and supervision of hospitals; all that relates to food and its preparation; the management of the dispensary; and finally a short chapter on minor surgery. The work bears evidence on every page that Assist.-Surgeon Woodward brought to his task a complete knowledge of his subject, and that he has devoted much time and thought to the organization of hospitals. The volume is issued under the auspices of the Surgeon-General, and will be received as an authoritative guide in all military hospitals.

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Death of Professor Lehmann.—The scientific world experienced last week a great loss by the sudden death of Prof. Lehmann, of Jena, whose chemical labors are known and highly valued all over Europe. The departed philosopher died of apoplexy, and had hardly attained the meridian of life.—*Brit. Med. Jour.*

SKETCHES OF U. S. ARMY GENERAL HOSPITALS.

Hospital No. 5.—Frederick City, Md.

Medical Officers.—The following gentlemen have been connected with this Hospital:—*Surgeon in Charge*, Henry S. Hewit, M.D., Surg. Vols., W. F. Thurston, Surg. 4th R. I. Bat. *Surgeons, U. S. A.*, Philip Adolphus, Cyrus Bacon, Jr., C. M. Colton. *Acting Assistant Surgeons, U. S. A.*, James P. Hyer, John Green, W. M. Hines, Nathan Webb, A. V. Cherbounier, Geo. A. Nicolassen, J. J. Hamlin, —— McKenzie, —— Phillips. *Medical Cadet*, H. S. Hannan. *Acting Med. Cadets*, Geo. M. Ward, Edward Martin, A. M. Wilder, S. W. Langmard, Gustavus Pratt, L. O. Morgan.

The city of Frederick is pleasantly situated in a fertile and beautiful valley, with an environment of distant hills. The town has the combined advantages of a compact well-built city, in the midst of a rural agricultural district. It is paved, lighted with gas, and supplied with pure soft water, brought in pipes from mountain springs. It is in these respects admirably adapted for the sudden emergency it was called upon to fulfil, in affording accommodation for the hospitals improvised after the great battles of the 14th and 17th of September. The completeness and efficiency with which this emergency was met, will live in all future history, and will reflect honor upon the inhabitants, who administered with boundless charity to the wants of the wounded, and the medical officers, who knew how to avail themselves of the local advantages; especially Assistant Surgeon Weir, U.S.A., and John J. Milhau, Surgeon U.S.A., who was immediately afterwards appointed Medical Director.

The U. S. A. General Hospital, No. 5 of Frederick city, Md., was called into existence to receive the wounded of the battles of South Mountain and Antietam. It consisted of two divisions, known as Novitiate and Convent. The Novitiate, which began to receive patients on the 18th of September, is a portion of the building belonging to the Society of Jesus, and used by them for ecclesiastical and religious purposes. It is pleasantly situated, fronting a wide street bordered by an alley with a large inclosure in the rear, well laid out, pleasantly shaded, and surrounded by a high wall. Two corridors, two large halls, each 40 x 33 feet, about 15 feet high, and twenty-one smaller rooms, averaging 12 x 16 feet, together with the Apothecary's shop belonging to the institution, were appropriated to hospital uses. Each floor was furnished with water, and every room lighted with gas. The shop was found provided with the necessary conveniences for dispensing medicines, and tolerably well furnished with the most important drugs, which were used as a matter of necessity in the absence of any supply in the Purveying Department.

The second division, known as the Convent, went into active operation on the 21st of September. It comprised the whole of the academical department of the monastery of the "Sisters of the Visitation, B. V. M.," situated on the same street and alley, diagonally opposite the Novitiate. The premises of the academy thus occupied, consisted on the ground floor of a large hall with an anteroom, the whole 60 x 40 feet, and 10 feet high, a range of smaller rooms, 5 in number, en suite, terminating in a refectory 40 x 20 feet, and two kitchens to the left of the refectory. On the second floor was a large handsomely frescoed exhibition hall of the same size as the one on the first floor, and 20 feet high. This room, admirably lighted and perfectly ventilated, was probably the most beautiful and salubrious ward which any army hospital in this country has ever possessed. There were besides two large wards on this floor, bordered by a railed balcony, both well lighted and ventilated, and three large rooms used as wards in the third and fourth stories. This building was likewise furnished with gas and water.

Both buildings were provided with ample inclosures for air and exercise, and had easy approaches for the reception of patients and the transaction of business, besides numerous smaller apartments for store rooms, officers, the private accommodation of officers, and the seclusion of such cases as would be offensive to their neighbours in the public wards. Both the institutions were furnished with privies of convenient size. The one at the Novitiate was at a sufficient distance from the house, and its odor was never perceptible in the wards. That at the Convent was nearer, and rapidly became offensive. The smell was, however, kept down by the liberal use of carbolic acid, and the utmost attention to cleanliness. In the absence of any other known cause, I am disposed to attribute to this circumstance the transient appearance of hospital gangrene.

The credit of the selection of these buildings and their partial preparation, is due to the prudence and foresight of Asst. Surg. Robert F. Weir, U.S.A. They are nevertheless private property, and the owners have a legitimate claim for rent and damages. It is to be remarked, however, that every effort has been made, and zealously sustained by officers, attendants, and patients, to preserve the premises from deterioration and injury, and that the objects for which they have been employed were, humanity to the wounded without respect to political divisions, and in a humble and imperfect manner the advancement of medical and surgical science, with a direct reference to the cause of humanity, the relief of suffering, and the promotion of mutual good-will between honorable enemies. The only rule of distinction observed regarding the wounded has been that severity of injury demanded and received priority and proportionate degree of attention and care.

Correspondence.

THE STATE MEDICAL SOCIETY.

[To the Editor of the American Medical Times.]

Sir:—Your correspondent "*Spiralis,*" in his account of the proceedings of the State Medical Society, scarcely does justice to the delegates from New York and vicinity. The increasing interest manifested in these meetings by the profession in that part of our State, as shown by the larger number of delegates who are annually present, is a matter of general observation and comment. The valuable paper of Dr. Auerbach, from Queens County, on the pathology and earliest symptoms of cerebral disease, deserve something more than a mere passing notice. We commend its careful perusal to every earnest physician. We confess we have been unable to find in Dr. Enos's method of treating club feet anything new or peculiar. Dr. Sayre's case of *charcoal imposition* was already well known to the members present, through medical journals and other sources. In his remarks on the treatment of joint diseases, he did not, in my opinion, do justice to Dr. Davis, of New York, who is well known in this section to have originated this method of treatment.

I regret to notice the indifference shown by the nominating committee to the rights and honor belonging to our cherished Society. According to the by-laws of the Society, no person can be eligible for permanent membership who has not already served as a delegate. Will not the nominating committee ascertain whether all the nominees have complied with this condition?

In the appointment of delegates to represent our Society at the annual meetings of sister-associations in other States, we notice another violation of its by-laws. It is expressly provided that the privilege of thus representing our Society can be bestowed only on bonâ fide members, and not upon delegates.

Yours etc. Y.

Troy, N. Y., Feb. 20, 1863.

Army Medical Intelligence.

ORDERS, CHANGES, &c.

Leave of absence for ten days has been granted to Acting Assistant Surgeon S. L. Loomis, U.S.A.

Surgeon A. P. Dalrymple, U.S.V., has returned to the Department of the South from leave of absence, and resumed his duties as Post Surgeon, Hilton Head.

Surgeon Ira Russell, U.S.V., has been assigned to duty as Medical Director, District of Southwestern Arkansas, at Fayetteville, Ark.

Surgeon S. F. Elliott, U.S.V., has arrived at Hilton Head, S. C., on duty with the 9th Maine Vols.

Ass't Surgeon Edward Dodd, U.S.V., has reported for duty at Major-General Grant's Headquarters.

The following assignments to duty in the General Hospitals, Washington, D. C., and vicinity, have been made since 1st February.

Acting Assistant Surgeon W. J. Butler, to Armory Square Hospital.
Acting Assistant Surgeon J. Q. Adams, to Lincoln Hospital.
Ass't Surgeon J. Carrier, 1st New York Vols., to Mountpleasant Hospital.
Acting Assistant Surgeon L. Wells, to Mountpleasant Hospital.
" " W. Eddy, to Fort Baker.
" " F. O'Donohue, to Seminary Hospital.
" " B. Hobbs, to Fort Baker.
Ass't Surgeon C. E. Goddard, U.S.A., to St. Aloysius Hospital.
" C. C. Lee, U.S.A., to Douglas Hospital.
Acting Assistant Surgeon T. H. Dearing, to Trinity Hospital.
" " T. H. Stewart, to the 4th New York Cavalry.
" " Sam'l Sharr, Provost Marshal's Office, Alexandria, Va.
Acting Assistant Surgeon Henry M. Dean, to Lincoln Hospital.
" " C. W. Clark, to Lincoln Hospital.
" " J. E. Warren, to Mountpleasant Hospital.
" " G. W. Hatch, to Lincoln Hospital.
" " S. M. Loomis, to Mountpleasant Hospital.
" " F. M. Kelly, to Campbell Hospital.
" " Thos. Carroll, to Mountpleasant Hospital.
" " W. B. Price, to take charge of Transportation Car running between Washington and Philadelphia.
Acting Assistant Surgeon G. K. Smith, to Convalescent Camp, Va.
" " C. McCormick, to Convalescent Camp, Va.
" " L. J. Draper, to Douglas Hospital.
" " H. F. Condict, to Lincoln Hospital.

Leave of absence for ten days has been granted to Assistant Surgeon R. O. Sidney, U.S.A.

Surgeon John O. Bronson, U.S.V., has relieved Acting Assistant Surgeon W. W. Hays at the Presidio de San Francisco, Cal. The latter has been assigned to Benicia Bks.

Ass't Surgeon J. H. Wythes, U.S.V., has relieved Assistant Surgeon J. W. Brown, 3d California Vols. at Camp Union, Calif. The latter has been assigned to Fort Churchill.

Ass't Surgeon C. W. Horner, U.S.V., has been placed in charge of the Summit House Hospital, Philadelphia.

Ass't Surgeon R. R. Taylor, U.S.V., has been assigned to duty at General Hospital Hestonville, Penn.

Leave of absence for seven days has been granted to Assistant Surgeon M. J. Asch, U.S.A.

Ass't Surgeon T. N. Lewis, 98th Ohio Vols., and Surgeon Charles Nenhaus, 29th New York Vols., have been honorably discharged the service of the United States on account of disability.

Surgeon John Shrady, U.S.V., has been assigned to duty in Nashville as Surgeon in charge of Hospital 19, Nashville, Tenn.

Surgeon Wm. Clendenin, U.S.V., now in charge of Emory Hospital, Washington, D. C., and Assistant Surgeon J. M. Brown, U.S.A., lately in charge of the College Hospital, Georgetown, D. C., have been ordered to report in person to the General commanding the Department of the Cumberland, and by latter to the Assistant Surgeon-General at St. Louis, Mo.

Three days' leave of absence has been granted to Acting Assistant Surgeon J. L. Johnson, U.S.A., and thirty days' leave to Assistant Surgeon P. P. Ingalls, 17th Maine Vols.

The resignation of Surgeon J. D. Robinson has been accepted by the President to take effect February 13, 1863.

Surgeon Joseph K. Barnes, U.S.A., Surgeons Frank H. Hamilton, Peter Pineo and Augustus C. Hamlin, U.S.V., and Surgeon George K. Johnson of the Michigan Vols., have been appointed Medical Inspectors with the rank of Lieutenant-Colonel.

Dr. William Goodell, of Pennsylvania; D. J. J. Hildreth, of Michigan; Dr. J. E. Herbst, of Pennsylvania; Dr. J. H. Phillips, of New Jersey; Dr. Daniel G. Brinton, of Pennsylvania and Dr. W. G. Varnum, of Missouri, have been appointed Surgeons of Volunteers.

Assistant Surgeon W. P. Pierce, 36th Illinois Vols., and Stephen J. Young, 48th Illinois Vols., have been mustered out of service to enable them to receive promotion.

Ass't Surgeon D. J. Caldwell, 74th Ohio Vols., dropped from the rolls of the Army for absence without leave, has been returned to his position.

Ass't Surgeon Dryden Smith, 9th Maine Vols., has been mustered out of service from date of muster in, his name not appearing on the rolls of his regiment, and there being no evidence of service rendered by him to the Government.

A hospital for diseases of the Eye and Ear has been established by the Surgeon-General in Washington, D. C. It is under the immediate charge of Surgeon J. J. Hildreth, U.S V.

A laboratory for the preparation of Medical supplies for the United States Army is being established by the Surgeon-General at Astoria, L. I. It will be under the control of Surgeon R. S. Satterlee, U.S.A., Medical Purveyor at New York city, and under the immediate charge of Surgeon Chas. McCormick, U.S.A. Another is being established for the same purpose at Philadelphia, Pa.

Original Lectures.

LECTURES ON MILITARY SURGERY.

DELIVERED AT THE

COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.

By WILLIAM DETMOLD, M.D.

PROFESSOR OF MILITARY SURGERY AND HYGIENE.

LECTURE X.

Pyæmia.

Gentlemen—Before proceeding in the regular course, I have a few remarks to make. First, I have received an anonymous letter, signed "one of your (that is mine) admirers," asking why a certain instrument, namely Heine's Osteotome, is not used in military surgery, and asking me to say something about it. Now, I do not know whether this anonymous admirer of mine is a member of this class or a reader of my lectures as reported in the Medical Times. These lectures are not intended to be a full course on general surgery with an enumeration of all the instruments which possibly may be used. The instrument the writer alludes to is an exceedingly ingenious piece of mechanism; it is a revolving chain-saw, but it is very complicated and very expensive, and to use it properly requires considerable practice; it is, furthermore, by no means so indispensable as the writer supposes, for I do not know of any operation that may not be quite as well performed with infinitely more simple instruments. Altogether the instrument is utterly unfit to be placed into the hands of military surgeons generally.

Another remark I beg to make is in reference to an operation of which I spoke, I think, in my last lecture, namely an osteo-plastic operation, by which it is intended to unite the patella to the lower end of the femur. I stated that the operation had been recommended in Europe, and been performed in some of our hospitals. For reasons which I gave you I condemned the operation. I have since paid a flying visit to Washington, and have seen the specimens of all the cases on which the operation has been performed, every one having terminated fatally. The specimens are all to be seen in the valuable museum in the Surgeon-General's office. I state this to show you that I was correct in condemning the operation, and that innovations are not always improvements.

We come now to consider an affection which carries off perhaps the largest proportion of the wounded in military hospitals, I mean pyæmia. The name intends to convey the character of the disease, that is a blood-poisoning by pus. Whether that is exactly correct we will try to develop by a brief investigation. For this purpose we must group together certain complaints which not only show an evident analogy, but which seem to run into each other.

We find that in a number of cases of suppurating wounds a blood-poisoning develops itself which is ushered in with rigors, furred tongue, vomiting, and diarrhœa and a rapid sinking pulse, and which generally terminates fatally by purulent deposits in different and distant parts, such as abscess in the liver, purulent effusion in the pleura or peritoneum or in some of the large joints; sometimes the large veins, especially the veins of the liver, are filled with pus. Here it is supposed that the capillary absorbents have taken up the pus, and carried it through the veins into the general circulation, where it acts like a ferment upon the whole mass of the blood. Microscopic investigation, however, shows that the lumen of the capillaries is not large enough to take up the pus globules, we must therefore assume that by some as yet unknown process these pus globules are decomposed, and that some element of pus is taken up.

Another form of pyæmia is developed in consequence of phlebitis. The veins become inflamed, the blood stagnates in them, and is changed into pus, which is washed into the circulation. Here again we must object that good pus may be introduced into the circulation by direct injection into the veins, and yet no pyæmic symptoms will follow. Professor Dalton made last week the following experiment for me to illustrate this point. He applied a seton to a healthy dog, and after suppuration was established he injected the pus into the femoral vein. The dog has remained perfectly healthy, no pyæmic symptoms occurring; an evidence that healthy pus is not sufficient to develop the disease.

Again, puerperal fever is essentially pyæmia; the veins of the uterus, opened by the elimination of the mucous membrane lining the organ, act as the conveyors of the poison. The disease may develop itself either spontaneously, as in some cases of suppurating wounds, the individual itself having generated the poison, or it may be brought on by contagion or by infection. Thus, an accoucheur, who has attended a case of puerperal fever, will communicate the disease to another woman in child-bed, or the puerperal woman lying in a vitiated atmosphere where others suffer with the disease will contract it by infection. In the Lying-in Asylum, in Vienna, a destructive epidemic of pyæmia carried off a large number of women, until it was found that the disease was communicated by the students from the dissecting room. In this instance the agent which generated the disease was not pus, but decomposed animal tissue. You all know the dangerous character of the smallest wounds received in dissecting. The danger here depends upon pyæmic intoxication of the blood, although there is no pus; the name of pyæmia, therefore, does not convey a correct idea of the nature of the disease; it is, in fact, a septæmia, for the decomposed matter of the dissecting room will produce the disease without pus, and pus to produce it must have undergone a certain decomposition, for pus in a closed abscess without access of atmospheric air will not produce it. I do not pretend to give you the correct pathology of this destructive disease, I only want to point out to you that the name Pyæmia, although it indicates some of the leading features, yet is apt to carry us to a hasty and faulty conclusion, and to lay before you a number of facts bearing upon the subject, which have all to be weighed in order to arrive at a correct appreciation. Pyæmia does not express enough, Septæmia too much, as it would embrace other diseases, such as, for instance, Scurvy, which do not belong here; a new name, Pyoseptæmia, would perhaps convey the best idea embracing the leading features, and excluding others which are foreign to the disease.

Pyæmia, or Pyoseptæmia as I think it should be called, is emphatically a blood disease, which may develop itself either spontaneously, that is, the individual itself furnishing the poison, or by contagion, or by infection, the poison being furnished either from other pyæmic patients or from dissecting room poison, or from patients with erysipelas, either by actual contact or through the medium of vitiated air. That it is a blood-poisoning is evidenced by the manner of its communication, by its symptoms, namely, that it is ushered in by constitutional disturbance, rigors, vomiting, diarrhœa, etc., frequently without any change in the appearance of the local affection or wound, that it is communicated to persons without wounds and in perfect health; thus the attendants in hospital wards where pyæmia is epidemic, and in lying-in asylums where puerperal fever rages, become attacked with all the constitutional signs of the disease, which do not yield until the sufferer is removed from the influence of the poisonous atmosphere. In all these respects pyæmia differs materially from the hospital gangrene, of which I expressed to you in my last lecture the opinion, that it was a local disease; it only attacks persons who have a wound, and local treatment, that is the destruction of the affected part, will cure it, and if no new infection takes place the disease will not return. Local treatment in pyæmia effects nothing.

Against the sporadic, or, as I have called it, the spontaneous development of pyæmia where the patient develops the poison within himself, and then infects himself, we cannot guard, because we know not what circumstances or concurrence of circumstances bring about this effect; all we know is that certain wounds are more apt to produce it than others, thus wounds of the head, especially where the brain is involved (here we find in a large proportion abscesses in the liver), all wounds near the trunk, especially about the scrotum and perinæum, and more than any others gunshot fractures. But if we are helpless in resisting the development of spontaneous pyæmia we are not so in preventing its epidemic occurrence. The utmost cleanliness of the wards, scrupulous attention to ventilation, and all the other hygienic measures upon which I have insisted on former occasions; avoiding as much as possible the accumulation of patients with suppurating wounds in the same ward, and not allowing a constant succession of wounded to occupy the wards, but to have the wards from time to time evacuated and thoroughly cleaned and policed. Stromeyer recommends to have always, if possible, a portion of the hospital unoccupied, so as to be able to transfer the patients from time to time to a clean ward. Do not allow the assistants who make the post-mortem examinations, to dress the wounded without a previous thorough cleaning and airing. In large hospitals it is best to detail an assistant exclusively for the post-mortem examinations, who is to have nothing to do with the wounded. Keep all instruments and other appliances, such as sponges, etc., used in the dead-house entirely distinct from those used in the wards of the hospital. If cases of erysipelas occur separate them from the rest of the wounded. If in spite of all these precautions pyæmia should show itself in an epidemic form the safest plan is to evacuate the premises, take your patients to another building or place them in tents or shanties, and have the hospital thoroughly overhauled before you occupy it again with wounded.

Pyæmia may appear in a more or less acute form, and its danger is in direct proportion to its acuteness. In the most acute form it becomes fatal before any purulent deposits in distant parts can take place. The patient is, while apparently doing well, suddenly seized with a rigor with vomiting and diarrhœa, cold extremities and all the symptoms of collapse, and never rallies; in other forms of the disease an irregular succession of rigors and all the other symptoms in less intensity indicate and lead to the purulent deposits, either in the large cavities or in the joints; the mildest form of the disease is where the purulent deposits take place in the cellular tissue near the surface, forming rapidly and without much previous local inflammation large abscesses, which in some instances assume a critical character, the system thus eliminating the poison. In some cases the disease is preceded by premonitory symptoms, the worst of which is venous hæmorrhage, which, although it may be but slight in quantity, indicates an obstruction in the veins above. As far as my memory serves me I have never seen a patient recover who has had, without apparent cause, venous hæmorrhage from a suppurating wound.

The treatment of Pyæmia consists in the free administration of diffusible and alcoholic stimulants, with quinine and opium. Under such a regimen some of the more chronic cases may recover; in the acute forms, the stomach rejects every thing. In these cases, I have found iced-champagne giving the most relief; in fact, the only thing which the stomach would retain.

If any of the assistants, or other hospital attendants, manifest the constitutional signs of Pyæmia, viz. prostration of strength, pale countenance, foul tongue, irregular chills, with vomiting and diarrhœa, they must for a while leave the hospital, have plenty of fresh air and quinine, and they must not too soon return to their duties in the hospital, otherwise they will have a relapse.

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The British Association for the Advancement of Science will hold their thirty-third annual meeting at Newcastle-on-Tyne in August next.—*Brit. Med. Jour.*

Original Communications.

EXPERIENCES IN MILITARY SURGERY.

By DAVID P. SMITH, Surgeon Vols.,

SURGEON IN CHARGE OF FAIRFAX SEMINARY HOSPITAL.

I have remarked somewhat at length upon amputation at the knee-joint, and I am very desirous of urging upon the profession the importance of its adoption whenever practicable. I believe on extended trial it will be found far less fatal than any amputation of the thigh. In almost any injury of the knee-joint it can be done either by circular incision a little below the patella or by one or two or three skin flaps. I should remove as little as possible of the femur, preferring to leave it intact so as not to open up its internal structure. In this operation no muscular tissue of any extent is wounded, which must and does add to its security.

I cannot give statistics of this operation, owing to my constantly changing post. Of two cases in which I performed the operation upon Confederate wounded, after the battle of Mill Springs, the progress for a fortnight was very favorable, and that too when subsistence for all was extremely precarious. After Pittsburgh Landing three cases —where I removed the limb at the joint—went on favorable for three days that I saw them. I could not ascertain their subsequent history. Of two operations at this hospital one died within twenty-four hours, apparently from the fact that the surgeon who administered the chloroform gave a very large quantity; the other case did well and recovered with a fine stump. A man was also brought here from Bull Run who had undergone the amputation on the field; he did well, and went home with a good healthy stump.

Shall Amputation be Performed in Gunshot Fracture of the Femur from a Conical Leaden Bullet?—The importance of this question cannot be over-estimated. It is one we are frequently called upon to decide.

While in the field at the West, although seeing many fractures of the femur, and performing or ordering performed many amputations for said injury, I was not stationary long enough at any one place to see the result of such practice. From dissection of such injuries after they were removed by amputation I was, however, enabled very early to recognise the hopeless nature of such cases if left to themselves.

Conical balls make terrible work. In one case I removed the limb at the hip-joint on account of the complete shattering into fragments of at least one-half of the femur by a minié. Civil surgeons who had hastened from Chicago to Pittsburgh Landing, and who assisted me with the wounded on board of the Crescent City, on its way up to St. Louis, assured me that they had never dreamed of anything like what they found.

The complete destruction of the bone can be described perhaps by saying that sometimes the whole shaft will be as completely shivered, and fragments driven into remote portions of the limb, as if a small shell had exploded in the bone. For example, in one case where I was picking out the fragments caused by a minié ball passing through the humerus at the insertion of the deltoid, I found a fragment of bone driven into the joint between the radius and external condyle.

Amputation of Thigh.—I take it that the great maxim to be observed in amputation of the thigh is to perform it as low down as possible. We ought to *hug* the knee-joint.

The method of performing the operation should, in my opinion, be the same as that before recommended to be practised on the leg, taking care, when the amputation is in the lower third, to so transfix the limb that the femoral artery and sciatic nerve may be in the short posterior and internal flap. When the anterior flap cannot be made of the length of the semi-circumference of the limb, it can be made shorter and the posterior increased in length. It will then resemble the method which I have seen Mr. Syme of Edinburgh prefer to all others. Of course, above the middle of the limb the femoral artery must be in the anterior long flap, affording a fine opportunity for acupressure, which I saw repeatedly practised in Scotland with success.

I can give no statistics of the cases of fractured thigh-bone occurring at the battles of Mill Springs and Pittsburgh Landing, because they were soon sent to St. Louis and Cincinnati.

After the second Bull Run battle I received into Fairfax Seminary hospital eighteen cases of this injury. Of these, at this date, 14th February, 1863, twelve have died, and one of the six survivors is in a very critical state. If he escapes a deposit of tubercle in the lungs, it will be more than I expect. Wasting suppuration and pyæmia carried off the twelve. In four of these eighteen cases secondary amputation was performed as a *dernier ressort*, but the abscesses present in each case forced me to perform the operations so high up that a fatal result followed.

Would not the plan of Chassaignac, to amputate by the écraseur, be worth a trial in some of these secondary amputations? The great advantage would be that the suppurating surface left would be exceedingly small, and the tissues would be so matted together that absorption of pus could hardly take place.

After the battle of Pittsburgh Landing I amputated once at the hip-joint, for complete shattering of the femur to fragments. It was on the sixth day after the receipt of the gunshot, and the man lived as near as I can ascertain for from six to eight days. I made a long anterior flap, which was firmly grasped by two hands passed in behind the knife, disarticulated and cut straight down; tied the arteries in the short posterior flap first, and finished with the femoral. The operation occupied not more than ten seconds, and not more than four ounces of blood were lost. He rallied well from the shock. No particulars of his case after I left him ever reached me.

Removal of Sequestra.—It has been my fortune several times to execute difficult and dangerous operations for the removal of sequestra imbedded in a large mass of new bone thrown out around the seat of a gunshot fracture, and I am sure no better argument is wanted to prove that, whenever and wherever practicable (and where is it not?), free incisions should be made, and all detached or semi-detached fragments of bone removed soon after receipt of the injury. Any pointed spicula which yet remain, a portion of the main shaft, need not be removed unless they irritate the surrounding soft parts. I am convinced that it is this procedure alone, making free and depending incisions, that will suffice in a case of shattered femur.

I have now on the table before me a preparation of the lower third of the femur, where I was compelled to perform amputation of the limb one hundred and thirty-five days after gunshot fracture took place, on account of necrosed bone to a large amount being so imbedded in new bone as to render extrication impossible.

An enormous mass of callus completely envelops the dead portions, with here and there cloaca.

In a similar case of injury received at the same time, I have just made an extensive incision, and extricated all the necrosed fragments that could be got at. At best the limb is not and cannot be made equal to one of Dr. Hudson's artificial limbs.

A new Splint in Fracture of Femur.—In my cases of shattered limbs I use a slat of pine wood extending from the crest of the ilium to just beyond the sole of the foot. It should be about two inches wide and half an inch thick. A similar stick runs up on the inside of the limb to the perineum. Join the two by a cross-piece below the sole of the foot, and by a cross-piece passing in front of the thigh just below the perineum; suspend the limb in this by separate strips of bandage passing under the limb, then over the two sides of the cradle, and the ends tying in a bow-knot; suspend the splint from above so that the whole limb and its dressings may swing clear of the bed; change the tension of this or that muslin-strip until the limb lies easy; lead the cords that suspend the splint a little downwards so as to make any *necessary* extension; raise the foot of the bed an inch or two to furnish counter-extension if needed; and you have my idea.

In no other way can an excised knee or gunshot fracture of the femur be so completely cared for. One will see at a glance that the limb can be most completely cleansed and dressed without stirring it in the slightest.

NEW YORK STATE MEDICAL SOCIETY.

By S. D. WILLARD, M.D.

In a former article I endeavored to impress upon the medical profession in this State, their obligation and duty to sustain the Medical Society of the State of New York, and to incite them to the performance of that duty. It is an institution that is exerting a high-toned influence upon the profession, and in behalf of the profession upon the public. By its scientific and literary publications, by its conservative opinions and stringent ethics, and by its constant aim to devise new means to avert and relieve human ills, it compels respect and esteem from men of every medical creed.

In its organization it was wisely made dependent for its members on delegates from the County Medical Societies and Medical Colleges of the State, thus creating a mutual dependence and stimulus each upon the other. The design of the present brief article is to call attention to the manner and frequency with which these several institutions have sustained their representation in the State Society, to award credit to those which have proved worthy of it, and to stimulate to efficient action those which have hitherto done nothing to deserve it.

By reference to the subjoined tables will be seen the number of delegates to which each Medical College and County Society is by law entitled, and the number by which each has been represented for several years past. Thus embracing eleven years:—

	Entitled to Delegates.	Present in 1853.	1854.	1855.	1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	
Buffalo Medical College....	1	0	0	1	1	0	0	0	0	0	0	0	2 in 11
Geneva Medical College ...	1	0	0	0	0	1	0	1	1	1	1	1	6 " 11
Albany Medical College....	1	1	1	1	1	1	1	1	1	1	1	1	11 " 11
College of Phys. and Surg.	1	1	1	0	0	0	0	0	0	0	0	0	2 " 11
University of New York...	1	1	1	0	0	0	0	0	0	0	0	0	2 " 11
New York Medical College.	1	0	0	1	1	0	0	1	1	1	0	0	5 " 11
New York Acad. of Med...	5	1	1	1	1	3	4	1	3	4	4	2	2 [illegible] to 5
Bellevue Hosp. College.....	1	0	0	0	0	0	0	0	0	0	1	1	
Long Island Hosp. College.	1	0	0	0	0	0	0	0	0	0	1	0	

The natural suggestion is—Have the colleges in the State taken an important part in sustaining the Medical Society? And why have the Buffalo Medical College, the College of Physicians and Surgeons, and the University of New York been so delinquent? It is not because the Society did not appreciate their delegates, for two of them were speedily elected permanent members, and to the Presidency. Without questioning what may have been the occasion of this neglect on the part of the several colleges of late years, I would present the above table for their examination, and urge them to apply the remedy which it indicates. The account stands against them in no favorable light. The table for medical societies is only prepared for a period of five years. A few hours' labor might have extended it for a period of twenty years, but I am *unwilling* to have the foreign readers of the "Times" know how negligent some of the County Societies have been of the advantages which they might have enjoyed, and of the *duty* which for so many years they have failed to perform. I would have such readers believe, that at a period more remote an exhibit would have been more favorable, while I would not have them call on me to confirm such belief.

The following table will show pretty conclusively where the county organizations are sustained, and what degree of interest is manifested in them at the present time, and it affords a very correct indication of the counties where medical organizations have been totally neglected, or been, to the discredit of the profession—abandoned.

The table is as follows:—

	Entitled to Delegates.	Present in 1859.	1860.	1861.	1862.	1863.
Albany County Medical Society	4	4	4	4	4	4
Alleghany Co. " "	2	0	0	0	0	1
Broome Co. " "	1	1	0	1	1	0
Cattaraugus Co. " "	2	0	0	0	0	0
Cayuga Co. " "	2	0	0	1	0	0
Chatauqua Co. " "	2	0	0	0	0	0
Chemung Co. " "	1	1	0	0	0	0
Chenango Co. " "	2	2	1	2	2	1
Clinton Co. " "	1	0	1	0	0	0
Columbia Co. " "	2	0	2	1	0	0
Cortland Co. " "	1	1	1	0	0	0
Delaware Co. " "	2	3	0	0	1	2
Dutchess Co. " "	2	0	0	2	1	0
Erie Co. " "	4	2	0	0	0	1
Essex Co. " "	1	0	0	0	0	0
Franklin Co. " "	1	0	0	0	0	0
Fulton & Hamilton " "	1	0	0	0	0	0
Genesee Co. " "	1	1	1	0	1	1
Greene Co. " "	1	1	0	1	1	1
Herkimer Co. " "	2	2	2	1	2	1
Jefferson Co. " "	3	0	0	0	0	0
KINGS Co. " "	7	1	4	3	5	1
Lewis Co. " "	1	0	0	0	0	0
Livingston Co. " "	2	0	0	0	0	0
Madison Co. " "	2	0	1	2	1	2
Monroe Co. " "	3	0	2	1	2	2
Montgomery Co. " "	1	1	1	1	1	1
NEW YORK Co. " "	17	3	3	9	3	6
Niagara Co. " "	2	0	1	0	1	0
Oneida Co. " "	4	3	3	1	2	3
Onondaga Co. " "	3	3	3	1	2	1
Ontario Co. " "	2	1	1	0	1	1
Orange Co. " "	2	0	1	0	0	0
Orleans Co. " "	1	0	0	0	0	0
Oswego Co. " "	3	1	2	1	2	0
Otsego Co. " "	2	2	1	2	1	1
Putnam Co. " "	1	0	0	0	0	0
Queens Co. " "	2	0	1	1	0	2
Rensselaer Co. " "	3	3	3	2	1	2
Richmond Co. " "	1	1	0	1	0	0
Rockland Co. " "	1	0	0	0	0	0
St. Lawrence Co. " "	3	1	1	0	0	2
Saratoga Co. " "	2	1	1	2	1	1
Schenectady Co. " "	1	0	0	0	0	0
Schoharie Co. " "	1	1	1	1	1	0
Schuyler Co. " "	1	1	0	0	0	1
Seneca Co. " "	1	0	0	0	0	0
Steuben Co. " "	3	0	0	0	0	0
Sullivan Co. " "	1	1	1	0	1	0
Suffolk Co. " "	2	0	0	0	0	0
Tioga Co. " "	1	0	0	0	0	0
Tompkins Co. " "	1	0	1	0	0	0
Ulster Co. " "	3	0	2	1	2	0
Warren Co. " "	1	0	1	1	1	1
Washington Co. " "	2	0	1	1	2	1
Wayne Co. " "	2	0	0	0	1	1
Westchester Co. " "	3	2	2	3	2	1
Wyoming Co. " "	1	0	0	0	0	0
Yates Co. " "	1	0	0	0	0	0

It will be seen that some of the larger societies, not remote from the Capital, like NEW YORK and KINGS, have done less than those like Chenango and Oneida.

The object of the present article is not to censure, but to point out directly where the want of interest lies, so that each one can see it, and so that it cannot be hid from any medical organization, nor from any member of the profession. It is to do this at an early period of the year, in order to stimulate to a full delegation from every section of the State for the next annual meeting, and to secure the permanent interest and influence which the State Medical Society now exerts.

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CHOLESTERINE, the fatty matter of bile, has been discovered by M. Beneke in various vegetable substances. It exists most abundantly in peas, in several species of grain, and even in olive oil.—*Brit. Med. Jour.*

REMOVAL OF A LARGE UTERINE POLYPUS

BY THE LIGATURE AND EXCISION.

By G. MILIANO, M.D.

OF NEW YORK.

As surgical operations for polypi of the uterus are somewhat infrequent, the following case, which came under my care, may not be without some interest to the profession in general.

Mrs. A. S——, æt. 43, naturally of a strong constitution, about four years ago, noticed that her catamenial discharges were of more frequent recurrence than natural. Instead of the menses taking place every four weeks, as usual, they made their appearance every two weeks. In this way they continued for six months, when they again became regular for a month or two longer. In this state of irregularity, and suffering more or less inconvenience from this circumstance, she went on for about one year more. At this time, without any perceptible cause, her menstrual flow became of weekly occurrence, the interval being supplied by a leucorrhœal discharge. The health of the patient was at length much impaired by reason of the abnormal discharges attended by pain in her back, loins, and thighs, with great weight or "bearing-down" sensation of the uterine region.

To this state of things subsequently were added phenomena of a different character. The leucorrhœal and bloody discharges were accompanied with constipation and incontinence of urine; her sufferings increased; excoriations of the vulva and thighs gave her much distress, while there was a very perceptible decline of her vital powers, so that her locomotion was rendered difficult and burdensome. While in this condition she called upon me for advice. The history which the patient gave of herself, without an examination of the disease on my part, led me to believe that she was laboring under prolapsus uteri—which opinion had also been expressed by other physicians who had examined the case. The patient herself dated the displacement from the birth of her last child, four years previously. On examination per vaginam, a large elastic tumor was discovered, occupying a portion of the dilated cul-de-sac, or upper portion of the cavity of the vagina. On passing the index finger up I discovered that the body which presented was not the uterus, but some abnormal substance connected with that organ. A pedicle of the tumor was found descending through the neck of the dilated cervix from the cavity of the uterus, simulating very much a cork within the neck of a champagne bottle, the smaller portion or pedicle occupying the neck and cavity of the uterus, while the larger or external portion formed a cap at the entrance to that organ.

The patient consenting to its removal, the operation was performed on the 15th of April, 1862, at the patient's house, in the presence of DRS. HEDGES and VAN VOSTE. She was placed on a table, with her head elevated and her thighs drawn up as in the operation for lithotomy. Two fingers and then the thumb of the left hand, properly oiled, were then introduced, and the tumor drawn down by the traction to some extent. While held in this position a strong waxed silk thread noose was placed around the lower portion of the tumor, and carried through the cervix up to the root of the mass or pedicle by a pair of forceps in the right hand, and there held, while an assistant made a strong traction from either side on the ligature, so as to strangulate the tumor at its origin, when a second noose was tied by bringing the two ends of the cord together. The ends of the ligature were now clipped off, the body of the tumor grasped by the thumb and the middle finger of the left hand, while the index finger of the same hand was made to guide the blunt points of a pair of curved scissors held in the right hand, so as to introduce it into the neck of the uterus, and carry it to the source of the tumor in the cavity of that organ, a little below the ligature. Its pedicle was then divided by three or four cuts of the scissors, when the polypus was detached and brought away. The bleeding that followed did not exceed a dessert-spoonful in amount.

On examining the growth it was found to be about three and a half inches in length, and two and three-quarters in width, the pedicle measuring two and a half inches in circumference.

The patient did not complain of any pain during the operation, though no anæsthetic agents were given, the whole duration of which did not exceed five minutes. When it was finished she arose herself from the operating table without any aid, and retired to her chamber, where she remained three or four days without any fever or any other unpleasant symptoms, being kept in the meantime on a light diet. At the end of a week, a few emollient and astringent injections having been ordered, the ligature came away, and the patient was discharged *cured*, and has remained in excellent health, with a regular menstruation ever since.

The combined operation of the ligature and excision, as practised in this case, was first performed in France by M. **Hervez**, of the Paris school. Hervez's operation is not, I believe, very frequently practised in this country.

No. 42 University Place.

Reports of Hospitals.

GENERAL HOSPITAL, No. 19, NASHVILLE, TENN.

CASES IN MILITARY SURGERY,

By JOHN SHRADY, JR., SURGEON U.S.V., IN CHARGE.

I.—*Fissure of the Inner Table of the Cranium—Purulent Softening of the Brain.*—M. A. T., 97th O. V., Co. 1, admitted Jan. 5, 1863, having received a slight scalp wound from a glancing musket ball, which gave him no alarm or uneasiness. Examination with probe detected no injury of the calvarium. Ordered simple water dressings, patient allowed the liberty of the ward. Jan. 10.—Up to this time, nothing has occurred worthy of note; except that he is very fidgety, and that he keeps getting in and out of bed. Appears intelligent upon interrogation. Nothing abnormal except a rather whitish tongue and accelerated pulse. The wound presents a somewhat puffy appearance about the edges. Jan. 15.—Obstinate constipation: cannot retain even liquids upon his stomach. Lies stupidly abed, with the flexor muscles of his arms and forearms strongly contracted. Has what, by an exaggeration, might be called a subsultus tendinum. Pupils dilated and irresponsive to light. Mutters incoherently, pulse not over 100. ℞. Potass. iod., grs. v.; syr. simpl. ℥ ss. Solve. Tal. ter in die cap.; and to get a speedy action of the bowels, ℞. Ol. ricini comm. ℥ j.; ol. tiglii, gtt. j.; M. s. cap. statim. Jan. 16.—No change for the better. Notwithstanding a repetition of the purgative, he still has had no alvine evacuation. Jan. 21.—Aggravation of all the symptoms. His nurse says that constipation is one of the leading features of the case. When asked to thrust out his tongue, slightly parts his teeth and exhibits its tip. Apparently dreads a further examination of the wound. With a view of a more thorough exploration, and perhaps of evacuating the pus, which is suspected to be the cause of the mischief, a crucial incision into the scalp was resorted to, without anæsthesia; about two drachms of pus escaped, and bone found denuded to the circumference of a dime. Beef-tea was assiduously but hopelessly pushed. Jan 2.—Died early this morning.

Post-mortem Examination.—Turbid serum follows the saw. Fissure of the inner table of cranium, with a rough sharp prominence an eighth of an inch to the left of the frontal suture, near the site of what phrenologists call "the organ of veneration." Ulceration of the dura mater immediately beneath, for the space of about two inches in length by about half an inch at the point of greatest diameter. Venous congestion well marked. Brain substance soft and receiving the fingers without resistance. Greenish pus in abundance.

II.—*Gunshot Wound—Compound Comminuted Fracture of Left Metatarsus—Secondary Amputation of Leg at Lower Third—Death by Pneumonia.*—Gottlieb Trost, 51st Ohio V. Co. B, private, admitted Jan. 19. Wounded six days previously by the accidental explosion of an old gun-barrel, which a comrade thoughtlessly threw into a camp-fire some fifteen yards distant from him. The charge passed directly through the metatarsus, entering on the tibial side. Although strongly urged to submit to an immediate amputation, he peremptorily refused. The wound on admission presented a ragged, sloughy, and blackened appearance. A thin, somewhat yellow-looking fluid was copiously yielded on pressure from all parts of the foot. Great depression of the vital powers. Jan 22.—By dint of the assiduous administration of tonics and stimulants, the patient is brought into a reasonably fair condition. Pulse firmer and fuller. Capillary circulation much improved. Condition of wound worse, the probe grates upon denuded bone and numerous spicula. There being no good reason for deferring surgical interference, amputation at the lower third of the leg, by the flap method, was performed during anæsthesia by chloroform. No shock. Jan. 25.—Shows no untoward symptom save indifference about food. Jan. 26.—Difficulty of respiration, loss of appetite, dulness on percussion, tubular breathing, cracked pot sound. ℞. Sulph. quinin. gr. j.; s. cap. quâque horâ; sinapisms; heaters disposed about the body; enemas of beef-tea. Jan. 27.—Pulse 130. Respiration 68. Coarse mucous râles. As far as can be ascertained no rusty or prune-juice expectoration. Evidently fast sinking. Continue treatment. Jan. 28.—Died just after midnight.

Sectio Cadaveris.—Fifteen hours after death. Heart and abdominal viscera healthy. Lower lobes of both lungs much solidified, and mottled with dark spots all over its substance. The left lung appears more implicated than the right, although in the latter the scalpel entered a small abscess.

III.—*Compound Comminuted Fracture of the Tibia and Fibula—Secondary Amputation of the Femur—Death.*—John Banse, 42d Ind. Inf., Co. B, private, a vigorous Prussian, aged 24 years, admitted Jan. 5, wounded by a minié ball on the 31st ult., the missile striking upon the crest of the tibia, producing a large lacerated opening. Both bones were discovered to be much shattered for about an inch and a half of their respective shafts; a free discharge of ill-conditioned pus and general condition of parts below point of injury anything but promising. Attributes much of his present condition to his long ambulance ride. Much constitutional disturbance, a white furred tongue, feeble rapid pulse, loss of appetite, and an anxious countenance. An erythematous blush suffuses the entire limb. Ordered a supporting diet, porter, etc. ℞. Sulph. quinin., grs. xij.; morphiæ, grs. iij. M. Divid. in chart. No. vj.; s. one every four hours. Case left to abide further and more favorable indications. Jan. 6.—Appears somewhat rallied, anodyne has had its proper effect. The erythema more circumscribed and fading away. Continue treatment. Jan. 8.—As the injury is so near the knee-joint, and his constitution is making futile efforts to carry its extra load, the limb was amputated at the junction of the lower with the middle third by the ordinary flap method. Anæsthetic chloroform. Jan. 9.—Passed a comfortable night under the influence of a strong anodyne, and, except a little smarting at the seat of operation, complains of nothing unusual. Appetite fair, pulse 130, which is a slight advance in frequency. Ordered water dressings to the part. Diet as before. Jan. 10.—Quiet and uncomplaining; still some febrile excitement. Appetite only fair. Jan. 11.—Expression of countenance "beseeching." Pulse 140. The diarrhœa with which he begins to be troubled tells upon his strength. Loathes his food. Jan. 12.—Has had one or two irregular chills. Hectic flush and Hippocratic countenance. Jan. 13.—As dressings are removed a suspicious oozing of blood occurs; wound at edges puckered, swollen, and emitting ill-odored pus. Jan. 14.—The blood which stains the dressings is quite thin, although not great in quantity. Some dyspnœa; dulness over part of left lung, but tubular, breathing not well marked. Jan. 15.—A comfortless night, owing to difficulty of respiration. Stares at you when interrogated regarding his feelings. Died at night. No autopsy from want of facilities, the hospital being only in process of organization.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, NOV. 12, 1862.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

TUMOR OF SCALP.—PAINFUL TUBERCLE.—SUPERNUMERARY FINGER, ETC.

Dr. Post presented several small specimens; the first consisted of a tumor, removed from the scalp of a woman, aged 50 years. It was situated on the left side, at the junction of the lambdoidal and sagittal sutures; was about the size of a small hazel-nut; had been growing for about two years, and the only circumstance which gave rise to the suspicion that it was not an ordinary encysted tumor was, that it had been the seat of occasional pain. It was removed by halves, and an incision having been first made through its centre, it was found that instead of being situated—as is usual with such tumors—between the scalp and pericranium, it was beneath the pericranium, and attached to the bone. Dr. Draper examined a portion of the tumor, and found it to be fibro-plastic in character.

The second specimen consisted of a small subcutaneous painful tubercle, about a quarter of an inch in diameter, removed from the leg of a woman, a short distance below the knee.

The third specimen was a supernumerary finger, removed from a young child; the fifth from the labia pudendi of a married woman; the sixth an eye, the seat of a remarkably developed staphyloma, removed from a child 4 years of age. The staphyloma in this case was due to gonorrhœal inflammation. The patient rapidly recovered.

He also exhibited a seventh specimen, consisting of the results of a series of operations for lithotripsy. There were numerous fragments of stone, each weighing from five and a half to eighty grains. All the fragments passed readily through the urethra, with the exception of two large and irregular-shaped ones. Both were arrested in the glans penis, one requiring the use of a small pair of forceps, and the other the slitting up of the glans to the extent of one-half or three-quarters of an inch for its removal. There were in all nine operations performed. The stone was crushed at each instance, very easily, although considerable difficulty was experienced in moving the instrument freely, while in the bladder. The stones consisted of oxalate of lime. At no time was there any urethritis or epididymitis as the result of the operative procedures.

SPECIMENS OF MORBUS COXARIUS.

Dr. Sayre presented a portion of the head of the femur and trochanter major, which he had removed from a lad aged 8 years. The patient, when about 5 years of age, was kicked upon the hip by another boy, and in the course of a few weeks after symptoms of hip disease developed themselves. He was confined with a splint for four months, but no extension was used. When he had partially recovered from the inflammation he fell again. Dr. Gross, who then saw him, recommended confinement, and actual cautery. Suppuration of the joint commenced in Oct. 1861. On the 10th of April, 1862, Dr. Sayre exsected the head of the femur and trochanter major. On making an incision down upon the diseased bone the joint was found open in two places, and surrounded by a fibro-cartilaginous material. The head of the bone was found loose in the joint, and almost entirely absorbed. The neck of the femur was entirely gone. The trochanter major, being found the seat of an abscess, was also exsected. After the operation the limb was placed in Dr. Bauer's wire breeches, and the wound rapidly healed. The patient living in the country, returned home at the end of two months, and Dr. Sayre did not see him again until the day before the presentation. The patient was exhibited to the Society, and though the affected limb was shorter than its fellow, it could be moved about in every direction without giving rise to any pain. He was enabled to stand erect without the aid of an apparatus.

Dr. Sayre exhibited a second specimen, consisting of the head and upper portion of the femur, which he had removed from a young lady from Burlington, Iowa. About two years ago the patient fell, striking on the left hip; the injury was followed by inflammation and suppuration, and in the course of the next eight months an opening in the joint formed spontaneously. At the time Dr. Sayre first saw the case the suppuration was very profuse, and the ilium being perforated there was considerable doubt in his mind as to whether an operation for the removal of the diseased bone would be advisable. The patient, however, coming from such a great distance, and withal being the victim of such severe suffering, all objections were waived, and the operation was performed on the 3d of July. After the incision was made the assistant, in attempting to luxate the femur, fractured it just above the knee. The head of the bone was found loose in the acetabulum, but the neck of the femur was entirely absorbed. As the operation was proceeded with, the reason why the femur could not be luxated was explained from the fact, that its upper portion had become firmly engaged in the opening through the ilium. The trochanter major was then sawn through, and the engaged portion easily removed. Passing the finger through the opening the surface of the ilium, external and internal, was roughened. All that portion was removed and the limb was placed in position, the wound being left open to afford a free exit to the discharge. The patient was very much depressed by the intense hot weather which followed the day of the operation, but she fortunately rallied. In the course of time an abscess formed on the internal aspect of the thigh, which opened, discharged, and closed again. Matter having again formed in that locality a second opening was made, which was found to communicate with one on the external aspect of the thigh; the communication between these two was then maintained by means of a seton, when a short time after exfoliated bone was discharged and the wound healed. Shortly after this occurrence she went home and recovered.

The third specimen consisted also of the head of the femur and trochanter major, removed from a girl aged seven years, who at the time was suffering from hip disease in the third stage. The neck of the femur was also entirely absorbed in this case. The wound entirely healed at the end of seven weeks, there being scarcely any suppuration following the operation. When last seen by Dr. Sayre the patient was doing exceedingly well, and there was but a slight amount of shortening. The affected limb was immensely developed.

Dr. Sayre also presented a fourth specimen, being the head of the femur and trochanter major, which were removed from a young girl, thirteen years of age, the daughter of Dr. Davis of Lancaster, Ohio. The disease had arrived at its third stage, and previous to the operation four sinuses had formed connecting with the joint. In this case also the thigh was fractured in the attempt to luxate the head of the bone. The reason for this was, that a large involucrum formed around the capsular ligament, causing firm anchylosis at that point. After removing the head of the femur Dr. Sayre had to pass down and saw off the bone below the trochanter. At last accounts from the father the child was getting on finely, and was able to get about without the use of crutches.

A fifth case was presented, which, however, did not terminate so favorably as the others. The specimens, consisting of the head of the femur and portion of the shaft, were removed from a lad aged fourteen, who had suffered from hip disease since five years of age. When he came under observation, there was a large sore extending from the ilium half way down the thigh, besides four sinuses on the anterior aspect of the limb, all of which communicated with the joint. The involucrum surrounding the joint was so firm, being almost half an inch thick, that it was necessary to pass down two inches below the joint, and saw off the femur at that point. For nineteen days after the operation the case progressed very favorably, when an attack of pneumonia supervened, leaving the patient very ill for ten or twelve days, at the end of which time he was seized with tetanic spasms, and died in the course of three days after. The only relief obtained for the sufferer was by means of chloroform and ice to the back of the neck.

On post-mortem examination healthy granulations were observed covering the upper end of the femur, and also all that remained of the surface of the acetabulum. There was no deposit of tubercle in any other part of the body.

With each one of the four specimens, Dr. Sayre exhibited a photograph of the patient, before and some time after the operation.

Lastly, Dr. Sayre exhibited a specimen of gangrene of the sac of femoral hernia, removed from a female of sixty-two years of age. The patient had been the subject of femoral hernia of the right side for 16 years, but not until a short time previous to death was such a state of things discovered by her physician. She had been subject to frequent attacks of colic, and during the last seizure the physician examined for hernia, and discovered that a portion of the abdominal contents had passed through the femoral ring, and had become strangulated. Dr. Sayre saw the case in consultation forty-eight hours after this discovery was made. Failing to reduce the protruding portion by manipulation, an operation was decided upon and accordingly performed. On opening the sac it was found to be gangrenous, and to contain about an ounce of grumous fluid. The sac was then divided and all the sloughy portion removed, while the portion of omentum engaged in the sac, being also gangrenous, was removed.

Dr. Krackowizer remarked, that never in his experience had he met with a case of gangrene of the hernial sac, even in those instances where the strangulated portion was sloughy.

Dr. Post thought that Dr. Sayre acted wisely in removing the strangulated portion of omentum, remarking that the results of such a system of practice were more favorable than when any suspicious-looking tissue was returned into the abdominal cavity.

SUPERNUMERARY THUMB, ETC.

Dr. Jacobi also presented several specimens. The first consisted of a supernumerary thumb, removed from the hand of a female infant aged nine months. The size of the two hands was the same, with the exception of a slight swelling of the upper portion of the right thumb, which in its turn was smaller than its fellow. The swelling upon the thumb was due to slight enlargement of the lower condyles of the metatarsal bone. The supernumerary member could be moved, it being possessed of an independent joint.

A second supernumerary thumb was next shown, removed from the left hand of an infant. This, however, had no joint, and was merely connected with the normal thumb by a peduncle of skin and connective tissue. This, however, was not the only anomaly in this infant. When it was first seen, being then but a few days old, there was a cleft palate and double hare-lip; besides this there was a supernumerary thumb on the right hand, flexion of the right index finger, and between the normal thumb and index finger there was a large web extending to the middle joint of the latter. On the left hand there was contraction of the second joint of the middle finger. In both these instances the contraction was done by the flexor muscles. On the left foot the large toe was complete, but the second toe consisted only of one bone, and on its end had two small excrescences, which took the place of the nail. The third toe was also only constituted of one bone, and was likewise without a nail. The fourth and fifth toes were contained in but one envelope of skin, and were likewise destitute of nails. There was also no joint to these. On the left foot the large toe was a great deal shorter than the corresponding member upon the other foot; there were two nails upon this, on either side of the anterior portion. The second toe was only about three-fourths the length of the great toe, and instead of a nail there were only visible two small grooves. The toe was constituted of one bone, but was possessed of a joint. The third toe was larger than the second, and like the fourth had but one joint, and was without a nail. The fifth toe was like the other toes, but had no joint.

In the family of the first child no anomalies of the sort had ever been noticed. The second child was one whose parents were first cousins. Dr. Jacobi remarked, in concluding a description of these specimens, that it was rather unusual to meet in both instances with supernumerary thumbs, the rule being that such superfluous members were mostly attached to the fifth finger or to any of the others. He had never before met with an instance where two toes were contained in the same skin, and had never before seen a double-jointed metatarsal bone.

TUBERCULOUS DEPOSIT IN UPPER LOBE OF LUNG IN INFANT.

The next specimen consisted of the lungs, liver, spleen, and kidneys of an infant of five months. The child had not been seen by Dr. Jacobi previous to the time when the post-mortem examination was made. The diagnosis that had been made was, tuberculosis with solidification of the upper lobe of the right lung, and enlargement of the spleen. The little patient had been ill for a long time, and had suffered from cough followed by emaciation and death. The lungs on post-mortem examination presented a very peculiar appearance. The right and left lungs were completely infiltrated with tubercle. There were, besides, extensive pleuritic adhesions throughout that side of the chest; there were, however, no evidences of pleuritis on the left side. Though both lungs were infiltrated the infiltration was most marked in the upper lobe of the right lung and the lower lobe of the left. A wax cast of the two organs in their recent condition, made by Dr. Prince, was exhibited, beautifully illustrating this condition of things. The liver was the seat of fatty degeneration. The spleen was considerably enlarged, as was also the kidneys.

Dr. Jacobi remarked that it was very unusual to have a greater amount of tuberculous deposit in the upper than in the lower lobes of the lungs. The peculiar appearance of the lungs had given rise to the suspicion that the parents had suffered from syphilis, but from all the facts that could be obtained such a suspicion could not be substantiated.

FOREIGN CORRESPONDENCE.

LETTER XXVII.

THE GRAPE-CURE TREATMENT.

By PROF. CHARLES A. LEE.

Baden-Baden, Sept. 20th, 1862.

A few words on the grape-cure (*cure de raisin*) may serve as an introduction to some notice of these waters of Baden-Baden. This grape-eating, as a remedy for pulmonary affections especially, has now become one of the established modes of treatment on the Continent, especially on the Rhine, and certain parts of Switzerland. Of course, so pleasant a remedy could not but be popular, and hence it triumphs over the sugar pellets. Dr. Curchod, of Vevay, on the banks of the Lake of Geneva, is quite celebrated for this line of practice, and has published an excellent monograph on the subject. This fruit of the vine, however, is not without its competitors, for we now hear on every side of cures by strawberries, figs, and peaches (*cures de fraises, de figues, de peches*), and other fruits. In the Tyrol, and north of Italy they are trying the opposite extreme, and are loud in their praises of the cure by raw ham (*cures de jamboucru*). I would not, however, depreciate the grape cure by comparing it with the latter, which I only mention to show what medical vagaries may occasionally become prominent; and I am even quite ready to admit that there is satisfactory evidence in favor of the great benefits resulting from the free use of ripe grapes, in certain cases. Some physicians rely on it altogether, while others begin the treatment by it, and then follow with the use of the appropriate mineral waters. It is generally agreed that the free use of sweet, ripe grapes not only aids nutrition, but abates the general excitability, modifies the blood, resolves pulmonary and other engorgements, and improves the secretions. In pulmonic cases of a sub-acute character, its effects are quite striking. The testimony is uniform on this point, and I have myself seen cases, where, in incipient phthisis, this treatment has served to abate the frequency of the pulse, the heat and dryness of the skin, the hectic flush on the cheek, and the frequent hæmoptycal attacks, and these are the very symptoms which contra-indicate the use of these mineral waters.

The treatment by grapes consists essentially in taking one pound of fresh ripe grapes, early in the morning, not swallowing the skins or seeds, and two hours after a still larger quantity. The patient dines at twelve o'clock on beef or mutton, boiled or broiled, stale bread well baked, and a glass of old Rhine wine, but no vegetables, except occasionally potatoes or carrots. About four o'clock, a certain quantity of grapes are to be taken; at evening, tea, with white bread. The patient is directed to take as much exercise as possible between meals, and abstain from drink, unless he should feel quite thirsty. The whole quantity of grapes to be taken in the course of twenty-four hours is from two to three pounds. Some who cannot well bear grapes so early in the morning, are advised to take a cup of coffee or chocolate first, and not begin the day with grapes until the stomach has become somewhat accustomed to them. It is believed that the best grapes for medicinal use are not those which make the richest and strongest wines: nor are those recommended which are sweet and aromatic to the taste, with small and hard berry, and thick skin, like the *Riessling* grape, but those of larger size, and thin pellicle, and which yield on pressure a more abundant and watery juice—such as those called the *Kleinberger*, and which are found on the Rhine, in the Palatinate, and the principal vineyards of the Bergstrasse.

The duration of the grape treatment is from four to six weeks, generally, though it varies, of course, in different cases. The best time to commence it is about the middle of September, when the grapes are supposed to be fully ripe. It is not my purpose to enter here upon any theoretical discussion of the therapeia of the grape-cure. Every one knows that this fruit abounds in sugar, gum, and vegetable mucilage, and other nutritive elements, and it is easy to understand how it may prove beneficial in many pulmonary affections, especially tuberculosis, by strengthening the vital forces, and contributing to the general nutrition of the body. It is often stated that the grape acts as a laxative, or even purgative, but this is a great error; it would be nearer the truth to say, that it more frequently acts as an astringent. Even the sweet Chasselas is not laxative. The experiments of Wohler and Millon have proved that the organic acids contained in the grape are oxidated and destroyed in the economy, leaving behind only alkaline carbonates. This is, doubtless, the reason why the urine, during the first days of this treatment, becomes alkaline, and why certain affections of the bladder and urinary organs are so speedily ameliorated.

I may, perhaps, have more to say on this subject hereafter, as I learn and see more of it. I leave it now, with an impression that it might, perhaps, be introduced with advantage into our own country, in the same affections in which it has proved advantageous on this side of the Atlantic.

American Medical Times.

SATURDAY, MARCH 7, 1863.

THE LUNACY COMMISSION BILL.

The Bill for the appointment of a Commissioner of Lunacy, now before the Legislature of this State, is altogether too limited in its scope to meet the wants of the class of unfortunates whose condition it is designed to improve. We have on other occasions, when this measure was before previous legislatures, discussed the subject of a Lunacy Commission at length, and we cannot forbear at this time briefly calling the attention of our legislators to what we deem vital features in such an Act.

The objects of such a commission may be stated as follows:—First, and most importantly, in order to improve the condition of the pauper insane. These poor creatures are congregated in the alms-houses of the different counties of the State, without any adequate provision for their necessities. They are now treated in many instances more barbarously than when the insane were thought to be possessed of the devil. The Senate Committee which visited these people in 1857, reported that they found many in cells and chains; in some cases the inmates sicken and die without any attendance whatever; the cells and sheds in which they are confined are *wretched abodes*, often wholly *unprovided* with *bedding*; in most cases female lunatics had none but male attendants; instances were testified to of *whipping* of male and female idiots and lunatics, and of confining the latter in loathsome cells, and binding them with chains. In some poor-houses, both males and females were found in cells *in a state of nudity*; the cells were intolerably offensive, littered with the long accumulated filth of the occupants, and with straw reduced to chaff by long use as bedding, portions of which, mingled with the filth, adhered to the persons of the inmates, and formed the ONLY COVERING they had. The duty of the Commission would be, annually, to inquire carefully into the condition of this class of insane, make an accurate census of their number, and report to the Legislature, with suggestions as to their improvement. Second, the Commission should be empowered to visit private asylums, eleemosynary and benevolent institutions, and inquire into the condition and wants of the insane. Third, in all criminal cases where insanity is pleaded, and in cases of alleged false detention for insanity, the Commission should act as experts. Finally, all questions relating to the insane, whether legislative or judicial, would come under the special attention of this commission. And these questions, thoroughly considered, are neither few nor unimportant. They are of almost daily occurrence, and require the patient study and dispassionate discrimination of minds educated in the jurisprudence of insanity.

The Bill introduced into the Legislature of 1861 was sufficiently broad and comprehensive to cover this entire field of labor. It required the Commission to visit, at least once in each year, all alms-houses, poor-houses, lunatic asylums, and jails within the State; to keep a record of such visits; to ascertain the number of insane inmates, the methods of treatment, the general condition and wants of such establishments, and report the same to the Legislature; to investigate and decide upon the question of the alleged insanity of any condemned prisoner who may apply to the Executive for pardon or commutation of sentence; to institute a careful examination into the mental condition of any person held in custody on a criminal charge who is suspected of insanity, etc., etc. It will be seen from this brief summary that that measure was admirably adapted to secure to the State a thorough supervision of the insane.

The Bill before the Legislature, as it comes to us, is extremely limited in its scope of duties, and in no respect meets the wants of the service which brought it into existence. It is as follows:—

Section 1. A Commissioner of Lunacy shall be appointed by the Governor, with the advice and consent of the Senate, whose duty it shall be to make a personal inspection of the various poor-houses and alms-houses in this State; and inquire into the condition of the insane in such institutions, and report to the next Legislature the result of his investigations, and recommend some suitable plan or mode of improving their condition.

Sec. 2 Said Commission shall be a suitably qualified medical man, and be entitled to a compensation of two thousand dollars per year, besides three dollars per day for expenses while employed in this commission.

Sec. 8. This act shall take effect immediately.

It would appear that the duty of this Commission is simply to visit the poor-houses of the State, and report to the next Legislature on the condition of the insane. Here its functions cease. We submit to our legislators that this Bill is based upon a most superficial view of the matter. It embraces but a single one of many important duties. The Commission should be enlarged, it should be permanent, and the duties prescribed should embrace not only an annual visitation of all the alms-houses, jails, asylums, and other institutions, but it should be a Board of reference of all questions relating to the insane. Incalculable good would flow from such a law executed by men qualified by long experience in the practical treatment and earnest study of insanity. We hope this Bill will be so modified as to embrace the provisions indicated, and then speedily become a law.

THE WEEK.

From the report of the Commissioners of Emigration it appears that during the year 1862 the whole number of emigrants was 12,660 more than arrived the preceding year, the whole number of passengers landed during 1862 being 105,385. Of these, 29,097 were citizens, or persons not subject to bonds or commutation, and 76,306 were aliens from whom commutation was paid or bonds executed, showing an increase in alien emigrants of 10,777 over 1861, and being 28,856 less than in 1860, 3,016 less than in 1859, 2,283 less than in 1858, and 107,467 less than in 1857; while the proportion to the average of former years, since 1847, is much less than half. Of these emigrants, 32,217 were from Ireland, 27,740 from Germany, 7,975 from England, and 8,374 from other countries. The State Emigrants' Refuge and Hospital, Ward's Island, has a farm of 106 acres. The whole number of inmates in the hospital and in the other department, during the year, was 3,247, being 1,832 less than in 1861, and 1,482 less than in the year preceding. The average weekly number at any one time was about 637. The net cost of support of the Emigrant Hospital and Refuge was $46,740 40, being $9,097 less than in 1861. The average yearly cost of support was about $72 44 a head, being about $10 78 per person more than in 1861, but $9 less than in 1860. Deducting salaries for doctors, officers, and other employees, it amounts to $48 13 for each individual per annum. Of the 637 persons supported on Ward's Island, 375 were patients in the hospital, and 262 were inmates of the Refuge Department. On the 31st December, 1862, there remained 655 inmates against 716 at the same time in 1861. The number receiving medical or surgical aid was 2,445 cases treated in the hospital, against 6,147 in 1856, 6,893 in 1857, 5,067 in 1858, 3,668 in 1859, 3,864 in 1860, and 4,129 in 1861.

The danger to the reputation of the practitioner in administering anæsthetics to female patients without the presence of a third party, has been several times painfully illustrated. The case of the dentist Beale, of Philadelphia, is fresh in the recollection of every reader. A case, occurring in Philadelphia, is reported in the papers, which will raise the question how far it is safe to use the speculum in the presence of the patient alone. It appears that the Guardians of the Poor sent a physician to attend a poor woman suffering from prolapsus uteri. As she relates the story, a female friend who was with her left the room. The doctor locked the door, and put the key in his pocket. She lay down on the bed and drew the sheet over her face, upon which the doctor proceeded with the examination. His movements rendering her suspicions, she uncovered her face, and saw that his person was exposed. She then ordered him to leave the room, and naturally expressed much indignation at his taking advantage of her weak and defenceless condition. The doctor denied the accusation, but she would not listen to him, and he left the house. She then went to the office of the Visitor of the Poor, and information was communicated to the Guardians of the Poor, who sent her to the Mayor, and he had a warrant issued for the arrest of the doctor. On examination before a Justice, he denied in the most positive manner the charge which she made. Whatever may be the merits or demerits of the parties concerned in this case, it is evident that the reputation of the practitioner who uses the speculum without the presence of a third party, is at the mercy of his patient.

In another column we publish a communication from Dr. Willard, of Albany, Secretary of the State Medical Society, which we earnestly commend to the attention of the profession of this State. In the tabular statement appears the relative activity of the county societies, and their interest, as also that of the medical colleges, in the State Society. It is proper to assume that the county societies are a fair index of the condition of the profession, scientific, social, and ethical, of the respective counties. It was a remark of the late Surgeon-General of the State, Dr. Vanderpoel, that in the examination of surgeons for volunteer regiments, he invariably found those the best qualified who came from counties which had active medical societies. Let those physicians who desire to elevate the tone of the profession see to it that the county societies are well sustained.

A case recently occurred in England, illustrating the responsibility of medical men in granting certificates of lunacy. A physician was heavily fined for mistaking the case, and committing to an asylum a sane person. We have reason to believe that the utmost negligence is often practised by physicians in this country in the examination of persons for alleged insanity. Such examples of severe punishment should serve as a warning.

Correspondence.

COMPOUND MONSTERS.

[To the Editor of the American Medical Times.]

Sir:—I am engaged in collecting and arranging materials for a monograph on double and parasitic monsters, fœtus in fœtu, and supernumerary formation of parts or organs in man. I propose the term *Diploteratology* as the title of the essay. It will comprise the history, literature, classification, description, and embryology of monsters, in which a duplicity or multiplicity of structure is found. It will also include the obstetrics and medico-legal relations of the subject. The object of this note is to solicit descriptions, more or less complete, of any or all cases of double monsters which may have presented themselves in the practice of any of your readers, or which may have come to their knowledge. Double monsters of the lower animals are also important; the writer intends, as far as possible, to accompany the description of each genus with an account of one or more parallel cases from the lower animals. It is desirable to have the following facts, at least (yet, even a very imperfect report would be of value):—The date, locality, sex, period of development, nature of delivery, character, extent, and situation of the two bodies; general description of the form, the number of upper and lower extremities; other malformations, as hare-lip, hemicrania, atresia of any of the normal openings of the bodies, etc. Also, if possible, the internal structure, single, double, or fused hearts, and other organs, etc. A rude diagram would add much to the value of the description. Any person who will furnish accounts of cases, or send numbers of journals containing descriptions of cases, shall receive due credit in the work, an early copy of which will be presented to him.

The writer has succeeded in collecting much of the literature of the subject, but has failed to procure Vrolik's work on double monsters. If any of your readers possess this work they will confer a great favor by loaning it to the subscriber for a short time. Curators of medical museums will do me a great favor by giving the number and general character of the double monsters in their collections.

Yours, etc.,
G. J. Fisher, M.D.

Sing Sing, New York.

A NOTE ON ENGLISH SURGERY.

[To the Editor of the American Medical Times.]

Sir:—The following remarks, which I jotted down in the spring of 1861, while in London, and then mislaid, may be taken in connexion with the recent cool assumption of superiority on the part of the English medical consultant in the case of Garibaldi.

"One of the great faults of medical men here, is the great tendency to follow implicitly the teachings of some great authority, without any reasoning upon their individual cases. If a Brodie should advise exsection of joints for acute synovitis, or a Ferguson propose division of the peroneus longus as a means of facilitating union in staphyloraphy, or a Bennett hint the weekly application of potassa fusa as a prophylactic, many zealous followers would, to use the usual phrase, try the merits of the procedures advised. The men here, of course passing over the lights of the profession, are too apt to run on rails and rules before laid down, and while, like the locomotive, everything is as before met with, they do splendidly; but the moment anything out of the usual way occurs, they are as helpless as said locomotive off from the track, and an object of commiseration equally with their patients. The habit of continually depending on others to do your own thinking, is a state of things not favorable for mental growth.

"After considerable time spent, I had almost said wasted, in visiting the hospitals in this metropolis, I have arrived at the conclusion that *relative influence* had more to do with the appointment and continuance in office of some of the surgeons than *relative anatomy*, and *regional connexions* more than *regional anatomy*. *Qualities of blood* have more influence, I fear, than those of the head and heart. After a visit here one is better fitted to read Roux's 'Parallel between English and French Surgery.' I have certainly seen as bad surgery here as did Roux."

Yours, etc.,
David P. Smith,
Surg. Vols.

MEDICAL MEN OF BERLIN.

Berlin, January, 1863.

The distinguished medical teachers in the University here may be comprised in the names—Surgeons, Prof. Langenbeck and Dr. Wihlms; Physicians, Prof's Traube and Frehrics; Ophthalmalogists, Prof. Von Graefe, Yunken, and Schweigger; Pathologist, Prof. Virchow; Chemist, Prof. Rose. I do not mean to say that these are the only distinguished medical men here, but their names are universally given as those of the teachers of whom the University is justly proud. A residence of some five months here has afforded an opportunity for enjoying the benefits of the instruction of some of these, and of noticing the personal characteristics of the men to whom we Americans, with a generosity which might be here imitated, are ready to do honor. It is well known that unlike New York, Philadelphia, or London, in Berlin as in the other German cities, there is but one medical school; the several lecture rooms, laboratories, clinics scattered about the city, being parts of the medical department of the "Frederick William University." Prof. Langenbeck has his surgical clinic in a series of irregular, badly-constructed buildings, in one part of the time; so Graefe his in another, while the venerable Prof. Yunken, who was a few years ago among the highest authorities on diseases of the eye, lectures in the Charity Hospital; so also Traube and Frehrics, while Virchow has a beautifully arranged building in the grounds of the hospital, where his pathological investigations are made, and lectures delivered. These men, while Professors, do not necessarily deliver day lectures in the regular series in the University building proper, where the student is regularly fitted for graduation as in our Medical Colleges. These clinics and Virchow's lectures are generally attended by graduates of this or other Universities, or by the student in the last year of his course. In the clinic of Prof. Graefe, for example, of the forty-seven registered students about forty are graduates. By "Clinic" here, a little more is understood than with us. Langenbe k's clinic has beds for more than 100 patients, so also Graefe's, and Professor Yunken has the large wards of the Charity Hospital from which to take his patients for the morning lecture, who are wheeled into the amphitheatre still reclining on their beds. With the exception of the clinic just alluded to, the arrangements for seeing are very bad. At Graefe's, in a little low room the students are seated on chairs, on a level with the professor; and only those who are very early have much chance to see the five or six patients on whom he makes his morning lecture. At Langenbeck's it is somewhat better, but still bad enough; since a man with his head in the way does not care to remove it, neither do the students seem to expect it, but bear the thoughtlessness in a way which Bellevue and New York men can't comprehend. Professor Langenbeck is a tall, slight man, about fifty years of age, a pretty operator, rather given to effects and poses, clear and learned as a lecturer; he speaks English quite well, and is up in American surgical literature, even to the Ether controversy. His lectures on Surgical Anatomy on the cadaver are excellent. Dr. Wihlms, unfortunately, has throat trouble, which prevents him from loud speaking or much; but as a surgeon he rivals Langenbeck in the wards of his new hospital, the Bethauien, which has about five hundred patients, and corresponds with St. Luke's, in New York, being under denominational care. Professor Yunken is a small precise man, more than 70 years old, still lecturing with great clearness and vigor, and operating like a man in the prime of life. His surgical and eye-clinic is the best ordered in Berlin. Professor Virchow is a short, spectacled man, seeming between 40 and 45 in years, with a clear eye and calm manner, and is exceedingly popular as a lecturer and politician, he being one of the principal liberal members of the House of Commons. Graefe is a tall, somewhat round-shouldered man, with iron gray hair and black mustache, and long full whiskers, with a fascinating blue eye and manner. He lectures in a very quick but a very clear way, illustrating frequently with chalk on the blackboard which is in the little room. He often gasps as if for more breath in the midst of his excited harangues, for they do partake of that character. His assistant, Dr. Schweigger, who is well known in Ophthalmic circles, gives instruction in the use of the Ophthalmoscope; he is a young man, of whom the future will probably speak more. The Charity Hospital containing about 1500 patients (there are beds for more than 2000, but it is never full) is the great Clinical School The wards are clean and well ordered, the diet lists excellent and ample, the staff full and able, but the ventilation is very bad. The buildings are but three stories high, a great improvement over our four story hospitals.

There are about six hundred medical students in Berlin, not exceeding this number, among whom are many Russians sent here by the Government; a few English, and other foreigners.

There is an excellent Veterinary College here, such as what we seem to greatly need at home, especially as our army require so many horses. There is a fine pathological museum in connexion with it, and about one hundred students attend the lectures. The Hospital for horses, dogs, and other animals in the grounds, is of great interest. It is under the patronage and control of the Government, as are most Prussian institutions.

Yours, etc.,

D. B. St. John Roosa, M.D.

Army Medical Intelligence.

CIRCULAR TO PHYSICIANS.

Surgeon-General's Office,
Washington, February 20, 1863.

The Surgeon-General would remind the medical profession that, some months since, a medical officer was detailed by the Department, to prepare the surgical history of the rebellion. It is intended that this history shall embrace, among other topics, the collected results of the gunshot injuries of the war, and of the operations performed for their relief.

Many facts bearing on these subjects can be obtained by an examination of the returns of the various military hospitals; and explicit orders have been issued to the surgeons in charge, as to the manner of reporting. Yet it is found, practically, that the results of all cases cannot be included in these reports.

In every depot of wounded, and after every action, there exists a large class of injured men, who, in various stages of convalescence, pass from the observation and treatment of the military surgeon, and are lost sight of by the medical department. These patients are those who are either furloughed, or discharged the service, by military authority, before their treatment is entirely terminated. Under such circumstances all past records of these cases are rendered valueless from the absence of a positive knowledge of their results.

To remedy this evil the Surgeon-General appeals to the profession of the country, and solicits their co-operation. He would ask every physician and surgeon who may be called upon to treat any officer or soldier, wounded in service, carefully to note the results of the case, to record his observations, and when the case shall have terminated, to transmit a copy of his observations to the Surgeon-General's office.

The following form is suggested:—

Form.

Character of Injury.

Name and Address of Physician forwarding it.

Date of Communication.

	Where Wounded and Date.	To what Hospital Transported.	What Operation, etc., Performed.	By whom performed.	Date of Furlough or Discharge.	Present Condition of patient. Account of case. Treatment, etc. Result.
Patient's Name and Age.						
" Rank,						
" Regt. and Co.,						
" Postal Address.						

In all cases of recovery after *excisions* of bone the amount and character of the movements executed by the patient with the injured limb, should be accurately described. Where amputation has been practised the character of the stump should be noted, especially when the operation has been performed through an articulation. In cases of compound fracture the point of fracture should be stated, as also the degree of efficiency of the limb remaining after treatment. In compound fractures of the femur the amount of shortening should be measured, and the strength and usefulness of the limb described. In those patients in whom injuries of the skull have occurred, or upon whom the trephine has been applied, the mental and physical conditions should alike be dwelt upon.

In thus placing before the profession the objects he desires to obtain, the Surgeon-General trusts that he will meet with active co-operation. By the means above indicated much information that is valuable may be collected, and the interests of the science of surgery materially advanced.

W. A. Hammond,
Surgeon-General, U.S.A.

[Medical Journals will please copy.]

A BILL TO PROMOTE THE HEALTH, COMFORT, AND EFFICIENCY OF THE ARMIES OF THE UNITED STATES.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the medical department shall unite with the line officers of the army in supervising the cooking within the same, as an important sanitary measure, and that it shall promulgate to its officers such regulations and instructions as may tend to insure the proper preparation of the ration of the soldier.

Sec. 2. *And be it further enacted,* That cooks shall be detailed, in turn, from the privates of each company of troops in the service of the United States, at the rate of one cook for each company numbering less than thirty men, and two cooks for each company numbering over thirty men, who shall serve ten days each.

Sec. 3. *And be it further enacted,* That the President of the United States be, and he is hereby, authorized to cause to be enlisted, for each cook, two under cooks of African descent, who shall receive for their full compensation ten dollars per month, and one ration per day—three dollars of said monthly pay may be in clothing.

Sec. 4. *And be it further enacted,* That the army ration shall hereafter include pepper, in the proportion of four ounces to every hundred rations; and tobacco shall be furnished to the enlisted men by the commissary department at its cost, and be charged against their pay, under such regulations as the Secretary of War may adopt for that purpose.

Sec. 5. *And be it further enacted,* That hereafter all nurses in the general hospitals shall be employed by authority of the surgeon-general, and hospital matrons shall receive ten dollars per month and one ration per day in kind: *Provided,* That the washing of hospitals may be given out by contract, at a price not to exceed the cost of the number of matrons authorized by the regulations.

Sec. 6. *And be it further enacted,* That all instruments, documents, and papers relating to the procurement of bounty land and other bounties, pensions, and orders of pay by or for officers, soldiers and seamen, or their legal representatives, who have been or may be in the service of the United States, be, and the same are hereby, exempt from tax duty.

Surgeon-General's Office,
Washington, February 26, 1863.

Sir:—It is desirable to make out, for exchange with the authorities at Richmond, a list of such Confederate prisoners as have died within the Federal lines. For this purpose you will cause to be made a thorough examination of hospital records, and of all other sources of information at your hand or under your control, and will as soon as possible forward to this office such a list arranged as follows:—

Name.	Rank.	Co.	Regt.	Where taken Prisoner.	Cause of Death.	Date of Death.	Place of Death.

Very respectfully,
Your obdt. servant,
By order of the Surgeon-General, U.S.A.
Signed Jos. R. Smith,
Surgeon U.S.A.

To all Med. Directors and Senior Med. Officers, at Harper's Ferry, Frederick, and Hagerstown.

ORDERS, CHANGES, &c.

Leave of absence has been granted to the following named officers:
Acting Assistant Surgeon G. W. Hatch, U.S.A., seven days.
" " P. D. Leys, U S.A., seven days.
" " Thomas Carroil, U.S.A., seven days.

The leave of absence heretofore granted Surgeon John W. Foye, 11th Massachusetts Vols., has been extended to the 2d March.

Surgeon F. G. Snelling, U.S.V., is at Hilton Head, S. C., as Medical Director, 18th Corps, commanded by Major-General J. G. Foster.

Surgeon E C. Franklin, U.S.V., has been assigned to duty in charge of the Camp Hospital, Ballard's Farm, near Vicksburg, Miss.

Surgeon T. F. Azpell, U.S.V., has been assigned to the charge of the Steamer, City of Alton, for Hospital purposes on the Mississippi.

Assistant Surgeon J. H. Bailey, U.S.A., has been ordered to report for duty to the Governor of New York.

So much of Special Orders 357, series of 1862, as honorably discharged Surgeon R. S. Salter, of the 1st Massachusetts Vols., on account of disability, has been amended so as to discharge him February 10, 1863, the date up to which he did duty with his command.

Surgeon E. L. Wundt, 62d Illinois Vols., has been mustered out of the service of the United States.

The following officers have been ordered to rejoin their respective regiments:

Assistant Surgeon J. T. Totten, 32d New York Vols., recently at the Lyceum Hospital, Hagerstown, Md.

Assistant Surgeon J H. Hassenpflug, 109th Pennsylvania Vols., now on duty at Baltimore, Md.

Surgeon Thomas J. Dumolt, 1st Maryland Cavalry, now on duty examining drafted men at Baltimore, Md.

Assistant Surgeon P. W. Randle, 1st California Vols, now on duty at Fort Bragg. Calif.

Assistant Surgeon Wolfley, 62d Ohio Vols., now on duty at the Convalescent Camp, near Alexandria, Va.

Assistant Surgeon Truman, 62d Ohio Vols., now on duty at Mountpleasant Hospital, Washington, D. C.

Medical Inspector A. C. Hamlin, U.S.A., to report in person without delay at the Surgeon-General's Office for instruction.

Surgeon Basil Norris, U.S.A., now on duty in the Army of the Potomac, has been ordered to relieve Medical Inspector J. K. Barnes, U.S A., in his duties as Attending Surgeon on Officers of the regular army and their families at Washington.

Assistant Surgeon Harrison Allen, U.S.A., to report in person to the Surgeon-General.

Assistant Surgeon R. M. Alexander, 5th Kentucky Cavalry, having tendered his resignation, and in consequence thereof having been discharged the service March 25th, 1862, without formal action by competent authority, the said authority has been confirmed, and Assistant Surgeon Alexander discharged the service as of the aforesaid date.

Special Orders No. 6, Headquarters 1st Army Corps, Army of the Potomac, dated March 24th, 1862, honorably discharging from the service of the United States, on tender of resignation, Brigade Surgeon C. B. Chapman, has been confirmed, and his resignation accepted by the President to take effect at the above date.

Assistant Surgeon Asa Coleman, 46th Indiana Vols., having tendered his resignation, has been honorably discharged from the service to date from December 26th, 1862.

Surgeon J. Taylor Bradford, U.S.V., has been mustered out of the service of the United States.

So much of Special Orders 39, current series, from the Adjutant-General's Office, as discharged Surgeon W. S. Grimes, 4th Iowa Vols., to date January 24th, 1863, is amended so as to discharge him September 8th, 1863.

Surgeon E. R. Scholl, 76th Pennsylvania Vols., is, by direction of the President, dismissed the service of the United States for conduct unbecoming an officer and a gentleman.

The vacancy in the 90th New York Vols. not being filled, so much of Special Orders 63, current series, as discharged Surgeon E. S. Hoffman by resignation, has been revoked.

Surgeons L. W. Read, 8th Pennsylvania Reserves, Samuel G. Lave, 5th Pennsylvania Reserves, and B. Rohrer, 10th Pennsylvania Reserves, have been ordered to report in person to the Surgeon-General of Pennsylvania, at the Continental Hotel, Philadelphia, Pa., on the 2d prox.

Surgeon E. J. Baily and Assistant Surgeon J T. Ghiselin, recently on duty in New Mexico, reported at the Surgeon-General's Office on the 27th inst.

Surgeon J. E. Summers, U.S.A., has been nominated and confirmed as Medical Inspector.

Medical News.

A New Solid Bandage has been recently contrived by Dr. Hamon. The material is gelatine or common glue, to which, after being dissolved in water, a portion of alcohol is added. The limb is then padded, in parts where considered desirable, and a bandage applied. This bandage is then brushed over with the solution, and allowed to dry; the process being repeated until sufficient thickness is obtained. If then cut open at the side, a stiff but sufficiently elastic sheath is formed, which fits the limb, and can be removed and replaced at pleasure.—*Brit. Med. Jour.*

The British American Journal published at Montreal, Canada, and edited by Dr. Archibald Hall, was discontinued with the Dec. number. It has been very ably conducted, being a fearless advocate of the rights of medical men, and it is unfortunate that the profession of Canada has not manifested more interest in its pecuniary success.

Dr. Kidd, in a paper on "Simple Syncope as a Coincident in Chloroform Accidents," takes the ground that in a certain proportion of cases death has ensued from syncope or shock, the result of apprehension of the surgical operation about to be performed, and not from the chloroform.

Original Lectures.

LECTURES ON MILITARY SURGERY.

DELIVERED AT THE
COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.
By WILLIAM DETMOLD, M.D.
PROFESSOR OF MILITARY SURGERY AND HYGIENE.

LECTURE XI.

Feigned Diseases.

Gentlemen—I must not conclude this brief course on military surgery without saying a few words on feigned and fictitious diseases. Of some such attempts at deception and the means of discovering them I have already spoken, while on the subject of examination for the draft. The motives are either merely to escape from duty, or to get a discharge or even a pension. We have less of these malingerers, as they are called, in an advancing and victorious army than in an army which has become somewhat demoralized by defeat, inactivity, and relaxation of discipline. You will meet with cases in the hospitals where the deception is carried out with so much cunning, perseverance, and endurance, that they may easily deceive a young surgeon, yet the men are rarely so familiar with the symptoms of disease but what they will frequently complain of contradictory ones, which must at once rouse your suspicion; they generally exaggerate; if they complain of pain, they make it out worse than it would be if the disease were real; if they pretend lameness their limping is exaggerated, and so on; besides, they generally obtrude their complaints upon eye-witnesses for fear of being overlooked. Withal, they have generally a good appetite, without losing flesh. Sometimes a number of men of the same regiment bring forward the same fictitious disease, having been taught and put up to it by the same person. Frequently the character of the men will give a clue to their complaint; they are what is called old hospital-birds, and are known in their regiment to be inclined to shirk from duty.

Of course, it is important to discover the fraud, because the service loses not only that one man, but if he is successful others will follow his example, and the men lose confidence in the surgeon; on the other hand, the plain dictates of humanity must check you from carrying your suspicions too far. Your suspicion once roused, close watching, low diet alternating with full diet, but the administration of a nauseating dose of tartar emetic before every meal, will rarely fail to detect the fraud; but as a general rule it is not politic to accuse the man or let him see that you suspect him, it will only put him more on his guard, and by rousing his amour-propre make him more persevering; by letting him think that you are deceived, it leaves a door open for him, or, as Ballingall says, it lets him down softly.

In our army feigned and factitious diseases are as yet not so common as in the old standing armies of Europe, where there are always some old rogues who will instruct the younger ones, and who make a regular sort of trade of it. The diseases which are most frequently made use of it in this way are:

Diarrhœa.—Where, as it is but too often the case, diarrhœa is epidemic, a surgeon is easily deceived, and I believe a man who reports himself sick with a slight diarrhœa. When you meet therefore with a case which resists the ordinary remedies, and where yet the general symptoms do not warrant or correspond with the pretended gravity and obstinacy of the case, let the man, instead of going to the common water closet, use the close stool, and examine his passages. You will soon detect the fraud; either he has no passage, or it is of a natural character and consistency, and you may send the man to his regiment for duty.

Paroxysms of Fever.—Where miasmatic fevers prevail, you might easily be imposed upon if a man were to feign slight paroxysms with headache and so on, but, as I have remarked above, they will exaggerate, and then the fraud is easily detected. They will sometimes chalk their tongue, and by introducing a piece of garlic into the rectum produce a pallid appearance of the countenance; but the pulse does not correspond with their statements, while the disease does not yield to the ordinarily effective remedies.

Hæmatemesis.—I recollect having seen at the same time in a military hospital a number of cases of vomiting of blood. The occurrence of so many cases of an otherwise rare disease without corresponding constitutional disturbance aroused suspicion, and by careful watching it was soon discovered that bullock's blood was conveyed to the men from outside the hospital, which they swallowed, and afterwards introducing their finger into the throat vomited again.

Chronic rheumatism is the commonest form and not easily detected. In most cases of real chronic rheumatism, with stiffness of the joints, you will generally feel a kind of crepitus on motion; if feigned, you will, on attempting to move the joint, meet with muscular resistance. Have those cases watched, and you will find the men, when they think themselves unobserved, move as nimbly as anybody.

Contraction of Limbs.—When a limb is actually contracted, and you straighten it by force, it will slowly recontract, whereas if it is feigned you will find that a muscular effort immediately draws it back; but to make sure, put the man under the influence of chloroform, and the deception will at once become apparent.

Paralysis.—A man will pretend utter inability to move a limb. If you find the muscles fully developed, not shrunk or atrophied, and the temperature of the part the same as on the other side, prick or tickle the limb while the man is asleep and you will find him move it, or prepare the red-hot iron as a means of cure; do not have the limb held, but approach it slowly with the iron, and long before you touch it you will see the paralysed limb move; or administer chloroform, and before the man is entirely under its influence he will move.

Epilepsy.—The convulsions of epilepsy are frequently imitated, and by taking a piece of soap in their mouth the men will foam at the mouth. Examine the pupils during a fit and you will find them react upon the stimulus of light, whereas in real epilepsy the pupils are immovable. I recollect a case of feigned epilepsy where it was difficult to examine the pupils satisfactorily, because the man made constantly rotary movements with his head. I quietly asked the assistants whether the man had ever complained of itching of the anus, for as it appeared to me evidently a case of epilepsy depending upon hæmorrhoids, I should be much surprised to see such a never-failing symptom absent. Next day the poor devil was observed all day scratching his posterior, and was immediately reported for duty.

Incontinence of Urine.—They will complain of constant dribbling of urine, but give them a good dose of opium, or wake them unexpectedly out of their natural sleep, and apply a catheter, and you will find the bladder full. At one time this pretended incontinence became very common in the Austrian army; the only way in which it could be stopped was to let the men understand that there was no harm in it, make them wear a urinal in their pantaloons, and do their duty. The complaints about incontinence soon ceased.

Ophthalmia.—The men will sometimes produce inflammation of the eye by introducing into it irritating substances, such as lime, tobacco, or the like; they will generally select the right eye, because it is more handy, and because the right eye is more important in aiming.

Amaurosis.—They will procure belladonna, and come to you with widely dilated pupils, and pretend to be blind. This fraud is easily detected, because it is very difficult to carry out blindness with your eyes open. In real amaurosis the pupil is generally irregular. The eye speculum will show the retina in a normal condition; and a good dose of opium, which counteracts the effect of belladonna, will make the dilated pupil contract, which it will not do in real amaurosis.

Ulcers of the Leg.—The men will sometimes, either by pressure or by irritating substances, produce ulcers. An experienced surgeon easily recognises an artificial ulcer; and if you have suspicion, place the leg in a closed box, where the man cannot get at the ulcer, and it will soon heal.

Self-mutilations are of frequent occurrence, and it is of the utmost importance to check them, for the example sometimes spreads with great rapidity. Some few years ago it was quite common in France for men to cut off the forefinger of the right hand to escape from conscription. Alexander Dumas introduces this kind of self-mutilation into one of his novels. I do not know whether the men got the idea from the novel, or whether the novelist took it from the men, but at any rate several hundred cases occurred within a short space of time, so that I believe some legislative interference became necessary.

After the battles of Lutzen and Bautzen, there were several thousand slight wounds of the hand among the French troops; this circumstance aroused the suspicion of the Emperor Napoleon, and he instituted a commission, at the head of which he placed Baron Larrey, to investigate whether these were self-inflicted wounds for the purpose of getting discharged from service. The report of that Commission was unsatisfactory to the Emperor; they reported that they could not decide whether those wounds were made by hostile bullets, or whether the men did it themselves.

Of course in cases of mutilation, even if the self-mutilation is established, the man is exempt, or if already in service must be discharged, and comes no longer into the province of the surgeon's duty. It is for Government to establish such laws as will prevent it, or at any rate disappoint the man in gaining his object.

Original Communications.

PELVIC PRESENTATION,

ITS PHILOSOPHY AND TREATMENT.

By J. V. P. QUACKENBUSH, M.D.,

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I SEND you, for publication in your excellent Journal, a few remarks upon the above-named subject; and in the outset of the discussion, discarding what the older and indeed some recent writers styled the knee and the foot presentations, I would state that I mean by pelvic presentation, that presentation in which the pelvis of the fœtus is the first *material* portion of the *ovoid body* which engages at the superior strait; and it matters not whether this portion is preceded by one or both of the lower limbs, or whether, doubled up, they accompany it, for the *mechanism* in each case is one and the same. This definition, then, comprises the pelvic presentation proper, the knee presentation, and the foot presentation in one classification, and the remarks which are applicable to one are equally applicable to the others.

Is the pelvic presentation natural, normal, or is it unnatural, abnormal? Are the efforts and machinery which nature supplies sufficient for the expulsion of the fœtus in these cases, or is adventitious aid, either manual or instrumental, necessary?

The *form*, *position*, and *structure* of the uterus afford strong *presumptive* evidence that the *natural* position of the fœtus, in its cavity, is in the direction of its axis or longitudinal diameter; that is, that one end of the fœtus, which, being doubled upon itself, constitutes an ovoid body, should present itself at the mouth of the uterus, while the other end should look towards the fundus of the organ.

The *form* of the uterus is a hollow ovoid, for the reception of a solid ovoid; and how natural it is that the longitudinal axis of the one should coincide with the longitudinal axis of the other?

The *position* of the uterus is vertical, looking down into the superior strait of the pelvis, *which*, with the excavation and the superior strait, constitutes a channel through which this ovoid body must pass; and, again, how natural for this body or boat to enter this channel with one of its ends in advance? or, in other words, that the longitudinal axis of the boat should coincide with the longitudinal axis of the canal through which it is to pass.

The *structure* of the uterus is such that on its efforts—which may be compared to so many cords—it is so directed and centred as to draw the body which is contained down to the strait into which the os uteri opens; and again how natural it is that the ovoid should present one of the ends of its long diameter to this opening? Now, in accordance with this presumptive evidence, based upon the conditions named, we find that nature generally acts, and that, when labor commences, with very few exceptions, either the vertex or the pelvis of the child presents itself at the opening of the superior strait.

These then are natural presentations. *Natural*, because the fœtal body, when doubled upon itself, more readily accommodates itself in the longitudinal axis of the uterus. *Natural*, because in this position it more easily passes through that channel which it is designed to travel, and *natural*, because all the efforts of the uterus are designed to expel it in that *direction*, and in no other, without artificial aid.

Are the efforts and machinery, which nature supplies, sufficient for the expulsion of the child in these cases, or is adventitious aid, either manual or instrumental, necessary? This question is not so easily solved as the one first proposed, and yet to prove that pelvic presentation is normal, this interrogatory must receive an affirmative answer; for that presentation cannot be regarded as natural which, *of necessity*, requires in its mechanism means other than those which nature furnishes.

In the vast majority of cases the vertex of the child presents at the superior strait, and the philosophy and management of these cases are so well understood and practised that in these instances the child is seldom stillborn. Not so, however, where the pelvis engages the os uteri, for here we meet with a fearful mortality. For according to the statistics furnished by Churchill and others, two of every seven children are born dead or die soon after delivery. Now, if this be a necessity, are we authorized to affirm that the pelvic presentation is a natural one? And if it be not a necessity, should we not show that this dreadful mortality is not the consequence of the presentation itself, but of the manner in which the cases are usually managed? and herein lies the difficulty in solving the question proposed.

Physicians are too little impressed with the idea that parturition is a natural process, and are therefore too apt to interfere with it. That *judicious interference* may abridge the time and diminish the pains of labor I doubt not, but I am equally positive that *injudicious* or *meddlesome* interference oftentimes converts an easy into a difficult labor, a natural into an artificial, a safe into a dangerous one.

How natural it is for the practitioner, after having sat by the bedside of his patient for two or three hours, and found no perceptible advance of the child through the os uteri, *gently*, *cautiously*, and *carefully* to insinuate his finger, and, looking into the groin, use gentle traction, and thus cause the delaying fœtus to advance; and at the same time how natural it is for him to draw down one limb, in order to use further tractive power when required. And yet, hard by this fact, we notice that one out of two and a half die *when* the foot comes down, while one of three and a half die *when* the foot remains up.

And what does this fact teach us? It teaches us a grand rule, a fundamental principle! It teaches us that even nature herself cannot, with impunity, interfere with her own works, and if nature cannot, should man attempt it? It teaches us, moreover, that the power used in the delivery of the child should be an expulsive power and not a tractive one. And it teaches us other rules and principles, which I shall endeavor to elucidate when I speak of the treatment of this presentation.

The presentation of the breech proper is the rule—its complication with the descent of one or both feet is the exception or violation of that rule, and when that violation occurs an excess in mortality is the result. Now, could I prove that the *cautious* drawing down of one or both feet *has been* and to a great extent *now is* the practice, I would furnish a strong argument to sustain my proposition, that not the *presentation* itself but the *management* of it causes the difficulty. But what author is willing to admit that he has practised in the manner indicated, and that such practice is wrong? In fact, the philosophy of this presentation is not understood, and without a knowledge of *it* I can hardly see how the practitioner can understand that his management of this presentation is not correct. True, experience should teach us, but it must be educated and enlightened, not blind experience. A man who has treated twenty cases in which the pelvis has presented, and has treated each case unskilfully, and the result in each has been a still-born child, has had *experience*, but *that* experience has taught him no useful lesson, has been of no advantage to him; can be of no advantage, unless he admits that his whole experience has been one continued error. But can we find any author who will make this confession? Yes, we can find *one*, and that one is Hunter, and with the remark and its illustration, which his experience and his honesty enabled him to make, I will conclude this part of the discussion. "When," says he, "I first began practice I followed the old doctrines in breech presentations, although I did not like them, but yet dared not broach new ones, till I got myself a little on in life; at *this time I lost the child in almost all the breech cases*, but since I have left these cases to nature I *always succeed*." There is great good sense in this observation of Hunter, and it proves two things: first, the folly of blind adherence to mere opinion, constituting *routinism*; and second, the point under discussion, namely, that the fatality in these cases is not the result of the presentation itself, but of the manner of its management. Having now disposed of the two points, 1st, that the breech presentation is natural, and 2d, that nature is of herself competent to effect the delivery of the child in this presentation, I will very briefly lay down what I conceive to be proper rules for its treatment.

1st. Be very cautious and yet exact in making your diagnosis.* The evidence of a vertex presentation is *positive*, that of a pelvic presentation is *negative*, and yet this negative evidence requires the most care and caution. When the vertex presents, gently pushing against the membranes, you *feel* the head. When the vertex does *not present*, then pushing against the membranes your finger meets *no resisting surface*, and this negative evidence tells you that some other part of the fœtus than the head presents, either the lateral plane or the pelvis. Now, this knowledge, negative though it may be, being acquired, you should for the present abandon the case entirely to nature, for an improper or untimely examination might result in a rupture of the membranes, the very accident which the first rule teaches you to avoid.

The object of this rule, then, is to notify you that the presentation is pelvic, and the knowledge obtained, you are not in *any case* to interfere in the first stage unless the life of the *mother*, and not the *child*, be endangered thereby.

2d. Abstain from all interference until the first physiological stage of labor is completed; that is, till the os uteri is entirely dilated. This rule, simple in itself, is seldom observed. The anxiety of the parturient woman to gain assistance, and the very natural desire of the accoucheur to afford assistance, militate very much against this rule. The practitioner should remember that labor is not a mechanical process only, but also a physiological one, and that for its safe performance the harmony between the two must be preserved. Who has not often observed, on making an examination, the vagina contracted, painful, and dry, while the mouth of the womb remained small and firm; and yet upon a subsequent examination, made one hour later, has found the vagina large, relaxed, and moist, and the os uteri fully dilated. And why this change? Simply, because these mechanical and physiological phenomena go hand in hand, and when we interfere and break up this harmony, difficulty, danger, or death will be the result. While the mechanical process of dilatation of the os uteri is progressing, another change is going on within the womb: the fœtus is being compressed upon itself, and its head is being flexed, so as to present its smallest diameter in its passage through the pelvis. It is an erroneous idea that the child acts the part of a wedge, and *thus dilates* the mouth of the womb, causing its opening, for this very process is accomplished when the side of the child presents. These reasons are applicable to all presentations, but they are especially applicable to the presentation under discussion, for while in others they cause delay and embarrassment, in *this* they cause danger and frequently death.* In the first, delay and embarrassment, because the passage is not prepared and open for the body which is to pass through; in the second danger and death, because the compressible portion of the body is compelled to undergo *undue*, untimely, and inordinate pressure in being driven forcibly through an orifice, which nature designed should be wide open to allow of its unobstructed passage. I think from the reasons adduced non-interference is absolutely necessary until the mouth of the womb is entirely dilated. The object of this rule is twofold: first, to prevent pressure of the body as much as possible by having the os uteri completely dilated; and second, to allow the head to become fully flexed, and thereby present its smallest diameter at the superior strait. This to the child is of vital importance.

3d. Use no tractive power, but let the fœtus be delivered by the expulsive power of the uterus alone.

This rule is very frequently violated, because the philosophy of this presentation is not well comprehended. It matters not which end of the ovoid body presents—whether the vertex or the pelvic—the uterus has an office to perform, that is, the forced flexion of the child's head, and we cannot interfere with this function with impunity. Now, to have this office performed, which is essential to the safe delivery of the child, the pressure must be from above, and consequently when the child is forced downwards, it is compressed upon itself and its head is flexed. But should any tractive power be used, then the very reverse is brought about, and the head becomes extended, and the death of the fœtus is the result. To make my meaning more plain, and better understood, let me illustrate: A natural case of vertex presentation offers itself. The labor pains commence and proceed regularly and strongly. Two, four, eight hours pass by, and no *mechanical* progress is made; the os uteri is dilated or dilatable; sufficient energy has been expended, as the practitioner *thinks*, and yet the head remains above the superior strait. What now must be done? The forceps are resorted to, and after severe and uncalled for traction the child is delivered, and the *apparent* history of the case is, a grateful mother, a successful and intelligent physician; while the *real* history is, a mal-treated woman, an injudicious and meddlesome practitioner! And why? Simply because he has not waited till nature, by means of her beautiful machinery, has caused the flexion of the child's head, but has attempted to accomplish the delivery by forcing a diameter of 4½ inches through a pelvis which nature had designed for the transmission of one of 3½ inches. Now reverse the ovoid body and the pelvis presents, time elapses, traction is made, and the same condition of things, only ten-fold more fatal in their effects, is brought about, and that presentation which, left alone, would have been normal with the head flexed, now becomes abnormal with the head extended and a still-born child is the result.

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* Your diagnosis of the presentation, not of position.

This then is the *first* reason why no traction should be applied in these cases but again: *if we do* make traction on the child, we must of necessity draw down one of the limbs, and thus convert it into a so called footling presentation, and here the naked fact stares us in the face, that one of every 2½ die in this presentation, whereas, one of every 3½ die in pelvic presentations proper. But what is the philosophy of this? What the modus operandi? *When* the os uteri is *fully* dilated the child will commence its descent into the excavation and will meet with no resistance from the walls of the uterine mouth, but if, to hasten this descent, we draw one of the limbs down, then the resisting fibres of the mouth encircle and firmly clasp the fœtal body, and from that moment commences a pressure upon the *body* which embarrasses the delivery, rendering it dangerous or fatal to the child.

Should I here be met with the objection, that traction can be applied by the blunt hook grasping the groin of the child, instead of by the limb, I would answer that the hook thus used, is a dangerous weapon, and very few will be satisfied with their experience in its use.

My third reason for not drawing down the limb of the fœtus is this. The fœtal limbs are not doubled across the child's body, like a tailor's when in a sitting position, but they are placed longitudinally on the anterior plane of the body, and even when the membranes are ruptured prematurely the navel cord lies between the limbs of the fœtus and is thus guarded from pressure, while a large portion of the body is passing through the uterine orifice.

My *fourth* reason for not interfering and using traction is of a negative character, and intimately connected with what I have already said, and is this. It causes delay to the child's descent till the parts are adapted for its speedy passage. Now it is of little moment how long the dilating stage of labor continues either to mother or child. The pains may be severe and long continued, but no injury to the child can result, for it is protected by its investing membranes and the fluid which they contain, and even if the membranes be ruptured, the fœtus can better endure the *uniform* pressure of the uterus, than it can the *partial* pressure of the fibres at the mouth as it is expelled through the *forcibly* distended orifice. I will now pass on and give the fourth rule for the treatment of these cases, which is this; allow the child to pass down in the direction that nature adopts, and facilitate the movement as you would in a vertex presentation. If any of my readers has explored his patient during the passage of the child through the vulva, he has noticed that the breech passes down, and observes the same directions and movements as the vertex, that it rotates under the arch of the pelvis and presents the appearance of an elongated tumor pointing *upwards* and *forwards* from the vulva. This direction is given to the fœtus by the conformation of the pelvis and by the distended perinæum, and I would facilitate this movement by gently pressing the breech up in the same manner as we do the head in its passage through the external parts. This is *directly* the reverse of the rule given by Churchill, for he says "as the breech passes, the perinæum must be carefully guarded with the left hand, whilst the right is employed in supporting the child as it is expelled, and carrying it forwards and *downwards* towards the legs of the mother." Now I would direct that you guard the perinæum with the *right* hand, and at the same time assist the *upward* movement of the child, for three reasons, *first*, because you are *assisting* nature by promoting the very thing she is endeavoring to accomplish; *second*, because you are relieving the distended perinæum, and *consequently* diminishing the pressure on the cord; and third, because you are drawing tense the abdominal muscles of the child, and through them the anterior muscles of the neck, thus aiding the flexion of the child's head, a thing necessary for its safe delivery.

The breech has now passed the vulva, and the fifth rule appertains to the delivery of the shoulders and the head. If the cord is still strongly pulsating, rely further upon the *expulsive* power of the womb, in order to keep the head flexed; if it pulsates feebly then grasp the child's body with a napkin and draw down gently in the direction of the axis of the strait. If the arms are turned up above the head of the child, then gently insinuate your finger *above* the shoulder and draw the arm down towards the child's face, and then treat the second arm in the same manner. You must still continue gentle traction, and if the head be flexed, it will easily come forward; if not, the proper way is to insinuate the finger of the left hand into the child's mouth, and press the finger of the right hand against the occiput, then having grasped the body with both hands you gently draw down the child's body, at the same time that you cause the flexion of the head by extracting with the left finger and forcing up with the right. The great danger at this stage of the delivery is using too much violence, for I am confident that more children are lost from this cause than from delay. When you have used the proper means you will sometimes find that no *proper* tractive power will cause the delivery of the head. In a case of this kind you must either apply the forceps or the perforator, in the manner usually indicated.

In making the above remarks, I have referred only to pelvic presentations devoid of all complications. Should these exist, then your treatment should be regulated by the circumstances of each case, and made applicable to the same. I have also made no allusions to the different *positions* of the pelvis, for they make little difference in the treatment. Nature, in almost every case, brings the occiput under the arch of the pubes; should, however, the abdomen face the arch, then a *gentle* rotary movement should be made, but much violence should not be used—the severe twisting or even dislocation of the neck may be the result.

ON THE PATHOLOGY OF CEREBRAL EFFUSION.

By JNO. B. CHAPIN, M.D.,

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Effusion of serum into the cavity of the cranium occurs, first, in that disease of children known as *hydrocephalus*; second, it occurs in that disease known as the *general paralysis* of the insane, and often in cases of chronic mental disease; third, it occurs also in that condition of congestion of the vessels from active engorgement, resulting in disease known as serous apoplexy; fourth, it occurs again, in that congestion resulting from passive engorgement of the cerebral vessels.

The cases occurring thirdly and fourthly, are susceptible of satisfactory explanation. The two first classes are involved in some obscurity. Hydrocephalus is regarded by some writers as an idiopathic disease; while, on the other hand, it is considered rather as a symptom. Writers of large experience and observation regard hydrocephalus and tubercular meningitis as identical. Barthez and Rilliet, Andral, P. Hennis Green, and Dr. Gerhard, coincide in this opinion. We are to regard, then, the presence of tubercular deposits in the serous membranes of the brain as giving rise to two stages of disease, differing widely. The first is a stage of acute inflammation of the membranes induced by irritation of tubercular matter. The engorgement of the capillary vessels is attended by serous effusion, the extent of which depends upon the severity of the acute stage. After the acute stage has abated, however, the effusion may progress—the sutures give way, and the head assumes that dropsical appearance which gives to the disease its name.

We cannot account for the continued accumulation of serum, on the subsidence of the acute stage, on the supposition that the condition of active inflammatory engorgement continues. Neither will it suffice to say it depends upon debility of the absorbents. We must look upon hydrocephalic effusion, as we regard any dropsical accumulation, as resulting solely from interruption of the venous circulation.

Dropsical accumulation within the cranium, while it may be detected in children, is not usually known in the adult until revealed by post-mortem examination. It is, however, one of the frequent appearances, we might almost say it is the invariable appearance, after death from general paralysis and chronic mental disease involving the membranes.

Effusion of serum, in these cases, so far as our observation goes, is accompanied by thickening of the membranes, particularly the pia mater and dura mater. The thickening of the membranes bears to the dropsical effusion the important relation of cause to effect. It is the product of inflammation, and, as the effused lymph becomes organized, the calibre of the more readily yielding venous capillaries is narrowed. Here the obstruction to the returning venous current begins. The chief seat of obstruction is, however, located at the exit of the venous trunks from the cranium. These will be found reduced in size.

In conclusion we may remark, this condition of the intra-cerebral circulation explains those apoplectic seizures, the result of sudden congestions, that occur in the course of general paralysis, and the atrophy of the brain substance which is apparent when traces of chronic inflammatory disease are seen. We may also understand how nearly analogous to other dropsies is effusion into the cranium, commencing and progressing as it does.

ELECTRO-THERAPEUTICS.

By H. LASSING, M.D.,

OF NEW YORK.

SPINAL CURVATURES.

Miss B., of this city, æt. 19, of a nervous bilious temperament, had, by habitual improper posture when about ten years of age, contracted a lateral curvature of the spine at the dorsal region, which, however, was left without any treatment until she had attained the age of 13 years. She was then treated by several physicians, without any improvement. Then, some dabbler, styling himself "Surgeon Artist," undertook to perform a cure by making her an instrument to wear, and which he said would mechanically restore the spine to its natural position. The poor girl submitted to the agony of wearing this heavy, ill-made contrivance for several months, and found that by its pressure two deep ulcers were produced, as well as a well marked increase of the curvature. No treatment, excepting for the ulcers, was resorted to for some time; then, a homœopathist was called in, who, after giving her a little of each kind of candy in his "medicine case," gave her the following prescription, the original of which, now in my possession, not exactly suiting her parents, was never taken to any druggist:—

"*Mr. Apothekary. yoo sha'l pliese cend me fore this meine patiend 1 kran of suplimatum coroscifum and part tham in 30 smal pabers. By order of Dokter* ———."

When she came under my treatment I found a triple curvature of the spine, commencing at the third cervical vertebra by a curvature to the left, and continuing down to the sixth dorsal, which was itself half an inch to the left of its normal position, the first dorsal, being the centre of the curvature, being about three inches out of place. Another curvature, in which the tenth dorsal vertebra formed the centre of the arch, commenced at the sixth dorsal and ended at the second lumbar vertebra. There was also a slight curvature to the left at the fourth lumbar vertebra. The right shoulder was some three inches lower than the left, and the head was considerably drawn to the right.

The treatment pursued was that of stimulating the muscles and integuments in the vicinity by the direct or primary current of one of Dr. S. B. Smith's electro-magnetic apparatus, by means of two fine copper wires adapted to the course of the spine. This application was made twice a day, the positive pole applied at the nape of the neck, the negative to the sacrum. I also had her strapped to a lounge in the prone position, with broad elastic bands with tension contrary to the abnormal curvatures, thus having her head incline more to the left than the right, and her right shoulder rather higher than the left. Friction with hair-cloths and occasional baths were employed, and the syrup ferri proto-iodidi was exhibited internally. She rapidly improved under this treatment, the curvature gradually decreased, and in two months after treatment was commenced she walked as straight as any one, without any mechanical appliance whatever, although, as a precautionary measure, a well adapted supporter is worn by her now.

In this case the stimulus of electricity, by increasing capillary and vascular action, increased the size and power of the muscles, and, aided by the proper mechanical appliances and constitutional remedies just described, effected an entire cure. It is proper to remark here that any other than a direct or primary current would not have answered in this as in many other cases, owing to the shifting polarity of all other modifications of electro-magnetic currents.

No. 238 9th Ave., New York, January, 1863.

Progress of Medical Science.

PREPARED BY E. H. JANES, M.D.

ON TURNING IN CASES OF DISPROPORTION.

Dr. Alfred H. McClintock has reported to the Obstetrical Society of London (*See Lancet, Sept.* 13, 1862), the results of seventeen cases in which turning had been performed on account of disproportion between the head and pelvis. Though the deformity was but slight, more or less difficulty was experienced in every instance in bringing down the head into the pelvis, and twice craniotomy had to be resorted to. In one instance the parietal bone next the sacrum was fractured in pulling the head through the brim. Nine of the children lived, and in several of the others the heart continued to pulsate for some minutes after birth, but respiration not being fully established they were recorded as "dead born." All the women recovered but one, who died of puerperal fever, at that time somewhat prevalent. He did not consider the operation so favorable for the child as some of its advocates had supposed, and in cases of slight narrowing only could he reckon with any degree of confidence upon saving its life; but would prefer the induction of premature labor in cases where an option is left us, and much contraction of the pelvis is known to exist. To the interests of the mother he considered the operation as possessing stronger claims in abridging the process of labor, in averting the possible contingencies of craniotomy, high forceps operation, or even rupture of the uterus. Its mechanical advantage, he thought, was due to the unlimited amount of force which we can bring to the aid of the uterus by traction on the body of the child.

Dr. Barnes observed that the revival of the application of turning to certain cases of disproportion, constituted one of the greatest merits rendered by Professor Simpson to obstetric practice. He called it a revival, for he thought there was abundant evidence that the great accoucheurs who practised one and two hundred years ago were accustomed to trust to this operation much more frequently than is done now. Not having the instruments with which we are enabled to encounter disproportions they were compelled to trust to their unarmed hands, with which they extricated themselves and their patients from many difficulties in which we resort to instrumental aid. He believed that we should return to a more sedulous cultivation of the hands as an obstetric instrument, and that material improvement in obstetric practice would result. After putting the question fairly to the test of experience he was inclined to regard this practice with favor in all cases where the disproportion is slight, and even regarded the chance of the child's being born alive as somewhat better than after turning under ordinary conditions, the common cause of disproportion being a slight projection of the promontory of the sacrum, on either side of which a marked hollow is preserved, in one of which the cord will be protected.

A correspondent of the *Dublin Medical Press* is disposed to criticise to some extent this treatment, believing that however successful it may be in the hands of such men as McClintock, Barnes, and Simpson, very questionable results would follow its general substitution for the use of the forceps by the less gifted members of the profession. He supports his opinion from the fact that presentation of the lower extremities is the cause of largely increased mortality of infants, even under favorable circumstances; that the largest cranial diameter is least when the vertex presents, and greatest when the chin is thrown up from the chest, thus rendering the first the most favorable position of the head for passing through the pelvis; and lastly, that the operation of turning, especially after the waters have been discharged and the uterus some time in action, is one of the most serious, if not the most serious in midwifery. The pelvic contraction being slight, he considers its influence on any given case of labor as problematical when we are in ignorance of the size and hardness of the fœtal head, and hence more than ordinary diagnostic and prognostic skill and experiences are necessary in order to determine the time and mode of interference. In regard to the advantage derived by traction on the body of the fœtus, the writer says it has been his lot to withdraw the severed head of a fœtus, which misdirected force had left in the uterus. He expresses confidence in the old maxim that meddlesome midwifery is bad, and if operation becomes necessary, he believes that which is least dangerous to the mother, the least doubtful in the event, and most easy of execution, will turn out to be most advisable.

ACUTE INFLAMMATION OF THE VOCAL CORDS.

Dr. George D. Gibb reports in the *Lancet* for Sept. 27th a case of acute inflammation of the vocal cords, as seen by the laryngoscope, producing complete aphonia, rapidly cured by topical treatment. The aphonia was complete, the patient being only able to utter the slightest whisper. On inspection with the laryngoscope, the mucous membrane covering the lower vocal cords was seen to be slightly tumefied, and of a bright crimson-red color. A solution of nitrate of silver (two scruples to the ounce of water) was applied directly to the bottom of the larynx, by means of a curved camel's hair brush, causing but little spasm, and a very slight amount of dyspnœa. A mixture was ordered containing small doses of tartar emetic, nitrate of potass, and acetate of ammonia in water. Only one application was made, as the voice was soon restored, and eleven days afterwards inspection showed disappearance of the redness of the vocal cords, the subsidence of the swelling, and restoration of the mucous membrane to its normal condition. In making these applications he prefers a soft brush to the sponge, and by aid of the laryngoscope he is in the habit of seeing his brush enter the larynx, and do its allotted duty with astonishing precision. He would not attempt the local treatment of any case of laryngeal disease without the aid of this instrument, for the reason that the epiglottis is occasionally found to be lying almost flat upon the glottis, and further pressure upon its anterior surface would be mischievous.

HORSE-HAIR AS A SUBSTITUTE FOR WIRE,

Is the subject of a communication to the *Lancet*, by Thomas Smith, Esq., Demonstrator of Anatomy at St. Bartholomew's Hospital. The objection to the wire is the difficulty of adjusting it to wounds of the eyelids, foreskin, scrotum, and other parts where the integuments are lax and delicate in texture, and the danger in withdrawing it of separating the imperfectly united edges of the wound. The hair is as unirritating as wire, and more easily adjusted and withdrawn, as was shown by a series of experiments on animals. Two wounds of equal dimensions were made on opposite parts of a dog's abdomen, to each of which four sutures were applied at equal intervals, horse-hair, such as is sold by fishing-tackle makers, being used to one wound, and fine ligature silk to the opposite. On the third day both wounds looked alike healthy, having their edges in close contact. On the eighth day, three out of the four silk stitches had cut their way out, and next day the remaining one came away, leaving the edges of the wound just separated, but granulating healthily. In the meantime the opposite wound had healed up soundly around the tracks of the horse-hair sutures, which remained in situ, exciting no irritation whatever. It was used by Mr. Paget in a case of double entropion, the wound in one eyelid being secured with horse-hair sutures, and the other with fine sewing cotton. At the end of a week the cotton sutures had cut out, while those of horse-hair remained firm. It is easily removed by seizing the knot with the forceps, and dividing the suture, when from its elasticity it springs open, or if long soaked in the secretions of the wound it becomes soft and pliable, whereas the wire, after remaining a few days in the wound, stiffens into a metallic ring. The writer has employed it in operations for phymosis, in circumcision, in wounds of the eyelids and other parts of the face. to the loose integuments of the scrotum and penis. It is not suitable in parts where there is much tension between the edges of the wound. The long white tail hairs are the best, and should be soaked for a minute or two in water, or they may be drawn once or twice through the moistened finger ends.

ON THE THERAPEUTICS OF CONSUMPTION.

In a paper read before the Medical Society of London, by Dr. Cotton, the author presented the results of some experiments which he had been carrying on for the last five years at the Hospital for Consumption, Brompton, upon the action of certain medicines upon phthisis. He had exhibited phosphorus, liquor potassæ, hydrochloric acid, iodide of iron, iodide of potassium, chloride of sodium, vinum ferri, glycerine, sesquichloride of iron, chlorate of potash, quinine, and phosphoric acid, each in twenty-five cases of uncomplicated consumption. After giving somewhat in detail the effect of each remedy, he concludes that since, during the administration of each one of the agents he had experimented upon, several cases were observed to run through the various phases of the disease, some to a fatal termination, it is obvious that, whatever the amount of benefit which in some cases followed their use, no one of such agents deserves the title of "specific." 2. It may fairly be concluded that the good effected by any of these agents was due to their respective tonic and upholding influence upon the general system. 3. In the majority of phthisical cases, steel—especially the sesquichloride of iron—and the mineral acids, appear to be the most effective; but tonics generally are productive of more or less improvement. 4. Since, however, even steel and mineral acids, as well as other useful tonics, are undoubtedly inert in a certain proportion of cases, it is not improbable that there are varieties or modifications of phthisis, each of which may require a particular treatment. As there are special varieties of many other diseases, requiring special modes of treatment, and yielding to none other, it is possibly the same with consumption.

The English Army Medical School is about to be removed from Fort Pitt, Chatham, to the Netley Hospital, near Southampton.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, Nov. 12, 1862.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

ENCEPHALOCELE—OPERATION—DEATH AFTER 11 DAYS—CONGENITAL RHACHITIS.

(Concluded from page 115.)

DR. JACOBI lastly presented a brain, calvarium, etc., of an infant whose history he gave as follows:—

Some weeks ago I was called to see a new-born child, then two days old, in order to determine the nature of a peculiar tumor on the head. I found that the child had been carried to full term, but was rather under size. It was perfectly well developed, with the exception of its head, which was proportionately small, being only about fifteen inches in circumference. There was a tumor situated over the posterior fontanelle, having the following dimensions: its base measured 4½ inches, its largest circumference 6½ inches, and its superficies 7½ inches. The lower portion of the tumor was covered with normal skin and hair, but near the top of the tumor this covering became very much thinner, until at the summit there was no trace of skin whatever. At that point the external portion of the tumor consisted of a bluish transparent membrane, showing old scars at different situations, which in my opinion were due to ruptures which had occurred during utero-gestation. There was no fluctuation appreciable, but a sort of elasticity was communicated to the touch which gave me the impression that the contents of the tumor, as is usual in such cases, consisted of a large amount of brain substance, with some serum. In lieu of the fontanelle proper, the posterior and inferior portions of the parietal bones were not formed at all, but the cranial cavity around the tumor was closed by means of a soft elastic membrane. The forehead of the child was lower than natural, and was bent back a little. The tumor was certainly large enough to leave no doubt as to the final termination of the case. The question came up with reference to the chance of saving life which operative procedure offered. The majority of such cases that have been operated upon have terminated unfavorably. I recollect that in one case that I operated upon by ligature five years ago, death ensued in two days. Another case is known in literature that had been operated upon in the same manner, and recovered; at least the patient was alive at the age of five years. Another successful case is also reported, in which a tumor of this sort was situated over the brow, and was removed by the knife. A third case has also been known to terminate favorably, puncture having been resorted to for that purpose seven different times, six times by the needle and once by the lancet. All the other cases that I could find where operation had been resorted to had terminated fatally. I however concluded to operate in this case, but not as before by ligature. On the 5th day I operated by means of two oval incisions, the extremities of which joined each other at the base of the tumor, the concavities looking towards the cranium. In this manner I cut down upon the mass, and in order to avoid unnecessary hæmorrhage applied the écraseur. This instrument, however, not being in perfect order, I was obliged to sever the peduncle by means of the knife, when about an ounce of serum escaped from the wound. The wound after this was closed, the edges of the skin stitched together, and a bandage applied over the whole. The day before the operation the child was subject to slight twitchings, and with the exception of the continuance of these phenomena the day after the child did very well. In the meantime it was fed with breast-milk, and had a little brandy. On the 2d day there were noticed some contractions of the hands, slight twitchings about the mouth, and a little squinting, but this passed away, and on the third day the child took the breast. This condition of things went on until the third day, when I looked at the wound. Perfect union had taken place almost throughout the whole extent of the wound, and as there was no smell from it I concluded to let it remain as it was. A few days after this an offensive odor being perceptible a piece of lint, which had previously been left in the wound, was removed. After this everything went on well until the eleventh day, when the child was suddenly seized with vomiting, followed by convulsions and death. I have said that on making the final incision through the pedicle of the tumor a large amount of serum escaped; this was due to the fact that the posterior portion of one of the ventricles was opened into, yet notwithstanding all this the child lived comfortably for ten days after.

On post-mortem examination the surface of the brain was found the seat of inflammation and the effusion of lymph, the surfaces of the two hemispheres being adherent to each other. The falx cerebri was much thickened, and both lateral ventricles were filled with a turbid looking fluid, evidently pus. The surrounding substance of the brain was much softened and disorganized.

Aside from the condition of the brain we have a very interesting lesson to notice in connexion with the cranial bones. The frontal suture was as large as we generally find it in children of this age. Here are also the two parietal bones, forming but for the almost entire absence of the occipital, an irregular arched vault. In all these specimens the bones are perforated, and are in a condition very similar to a specimen of calvarium exhibited some time ago to this society by Dr. Krackowizer, in which the child died of craniotabes. Here can be seen several translucent spots in the bone, each surrounded by an increased deposit of bony tissue. The bones taken from this child dying of encephalocele are not only in a similar condition, but the transparency is more pronounced, and the evidences of the existence of craniotabes are very plain. From the facts in the case, supported by the appearances here presented, I should claim the case as one of congenital craniotabes.

HERNIA OF DIAPHRAGM FROM STAB.

DR. MARKOE presented a specimen of hernia of the diaphragm, taken from a patient admitted into the N. Y. Hospital ten days ago, and remarked that it presented a point in its history of some interest, both in reference to diagnosis and to prognosis. A man was stabbed with an ordinary sheath-knife in several places on the left side between the fifth and eighth ribs. Two of these wounds passed deeply into the cavity of the chest, as was ascertained by a probe. Dr. Markoe saw the patient twenty-four hours after the reception of the injuries, and he seemed in a very comfortable condition; there was no hæmorrhage from the mouth, neither was there any cough nor any severe pain complained of. The edges of the wound were carefully brought together by the House-Surgeon. On examination of the chest the amount of resonance, especially at the lower part of the affected side, was greater than natural, but this Dr. Markoe was disposed to refer to the crowding of a distended stomach against the diaphragm, especially as the respiratory murmur could be heard nearly as low down as the lowest wound. In passing away from the bed, however, it appeared to Dr. Markoe, that the breathing was more accelerated than it should be, and he accordingly left directions with the House-Surgeon if any pain should be complained of to apply a larger blister. The application of the blister was rendered necessary in the course of the next twenty-four hours. That side of the chest being thus left very sore no thorough examination could afterwards be made. On the third day the breathing was a good deal more difficult, but the respiratory murmur was still heard distinctly as low down as before. The wound was in such a position that it was at one time supposed that the pericardial sac had been opened into, and perhaps the apex of the heart wounded. In the course of the next forty-eight hours, respiration becoming gradually more labored, he sank and died.

On post-mortem examination the cause of the symptoms was very satisfactorily made out, for through an opening into the diaphragm was thrust a large knuckle of the transverse colon. There was another wound a short distance from this into the diaphragm, but this was not the seat of any hernia. The peritoneum around the wound and that covering the hernia was commencing to take on inflammatory action. In conclusion Dr. Markoe stated that the case was interesting as an instance of a condition of things which not unfrequently obtains from stabs or severe contusions, and which, notwithstanding the very serious lesion which exists, is often for a considerable length of time unattended with any correspondingly grave symptoms. The failure to recognise this peculiar condition, however, could not have suggested any alteration in the treatment.

Dr. Peaslee presented two ovarian tumors which he had removed twelve weeks previously from the same patient. She had noticed an increasing development of her abdomen for more than two years past, and had submitted during the past twenty months to 27 tappings for its cure—about 800 pounds, in all, of fluid having been withdrawn. All this fluid, although thought to be from the cavity of an ovarian sac, was in reality drawn from the peritoneal cavity. The operation of ovariotomy was performed on the 30th of last August, or twelve weeks since. A tumor consisting of an aggregation of different-sized sacs, and containing 12 pounds of fluid, was at first removed from the right side; the pedicle being so short that the sac even rested in contact with the uterus. After the removal of this mass, on passing the hand into the abdominal cavity, another morbid growth was discovered upon the opposite side, about the capacity of a quart bottle. The surface of this tumor was very vascular, and throughout the greatest extent of its surface presented the tufted appearance of the uterine surface of the placenta, so that the least touch was sufficient to produce hæmorrhage. This pedicle was about two inches long. At several points the tumors were adherent, and in overcoming these adhesions considerable hæmorrhage was induced. There were in all five ligatures applied, three on the left side and two on the right. The last two did not come away until within the last four days. It would not have been possible to apply the clamp on the right side, and Dr. Peaslee prefers the ligature in all cases. Another peculiarity of the case consisted in the fact that the patient had not a single bad symptom for two weeks and a half after the operation, when typhoid symptoms began to show themselves, and the sclerotic coat of the eye became jaundiced. Dr. Peaslee thought that the fluid had commenced to re-accumulate in the peritoneal cavity, and was at the same time undergoing decomposition. A tube was accordingly introduced by the side of the ligatures, and about a gallon of offensive liquid in all at different times removed. After removing the decomposed fluid the peritoneal cavity was washed out by a solution of common salt and albumen in water, in the proportion in which they enter into the composition of the natural peritoneal secretion. The fluid was removed, and the cavity washed out twice daily for six weeks, from a pint or a gill of this fœtid secretion being each time removed. As the case progressed these operations became necessary less frequently, until just before the ligatures came away, when they were dispensed with altogether. This procedure was resorted to five years ago by Dr. Peaslee in another case where similar symptoms occurred after ovariotomy. At each accumulation of the fluid in the cavity the typhoid symptoms were aggravated, but were in turn at once relieved after the evacuation of the fluid and the washing out of the peritoneal cavity. Dr. Peaslee did not hesitate to attribute the recovery of these two patients to this procedure. All his cases of ovariotomy, five in number thus far, had been successful.

Dr. Sayre remarked, that the case was a very interesting one to him, as illustrating the bad effects of matter being retained in the system, and the good effects of a free exit. The principle which applied itself to joints in this respect was eminently true with other of the shut sacs of the body.

Dr. Finnell exhibited the fœtus and placenta removed from a woman 37 years of age, the mother of six children. Dr. Finnell had attended her in each of the previous confinements, and never had any difficulty occurred. The labors were short and severe. On last September she thought herself five months advanced in gestation, and was fearful that the child was dead. Two weeks after she felt slight labor pains during the night, and delayed sending for the Doctor until the following morning. Dr. Finnell, on arriving at six o'clock, found her in severe labor pains, and very soon after she expelled a large oval mass from the vagina, consisting of the fœtus and its envelopes entire. About a quart of blood followed in a gush, and this prostrated her so much that she soon after sank and died. The uterus had firmly contracted. The placenta had undergone fatty degeneration. The interest of the case consisted in the fact that death was caused by the loss of such a small amount of blood. The Society then adjourned.

FOREIGN CORRESPONDENCE.

LETTER XXVII.

HOSPITALS OF BERLIN.

By PROF. CHARLES A. LEE.

Berlin, Oct. 3, 1862.

I reached here a few days since, and have been busily occupied in visiting the hospitals, and other public institutions of the place, of which I may speak hereafter. On my way I stopped a few days at Frankfort, also Mayence, Cologne, and other places on the Rhine. At Frankfort, Dr. Funke, formerly physician to the Duke of Hamilton, showed me his private hospital, and gave me the history of some very interesting cases, of which I will communicate one, by way of postscript. He also accompanied me through the Leuchenberg Hospital, so named after its founder, who was remarkable for walking the streets in a zigzag course, "to avoid," says Goethe, "the wandering ghosts of the numerous patients he had sent to Hades." Lectures are given here on anatomy, and other branches of medicine, in connexion with the University. The Museum of Natural History is the best in Europe, after London, Paris, Berlin, and Vienna. The osseous collection is nearly unrivalled. The professors were absent, it being their summer vacation, so that I failed in seeing them, as was also the case at Heidelberg University.

I visited the large Burgen Hospital at Cologne, where I recognised as many distinct smells as Coleridge points out as peculiar to this city. I cannot say, however, that they characterize the hospital wards as distinct from the city proper; certain it is all the *Eau de Cologne* made in the place does not suffice to extinguish them. But New York has nothing to boast in this regard, or in respect to cleanliness generally, over any European city I have yet visited. In this respect, indeed, I believe it may safely be said to be the filthiest, as it is the worst managed city in Christendom.

On my way here I passed through several places which deserve mention in a medical way, but of which I must at present say nothing. A few words in regard to the pleasant city of Brunswick may not be out of place. This is the capital of the Duchy of that name, and is the seat of an Anatomical and Surgical College, so called, founded in 1750. The college has but slight reputation in Germany, and a very small number of students, not more than a dozen; but for a man of quiet disposition and studious habits, who wishes to learn German, and at the same time have abundance of material for dissection, a pleasant room to work in, and highly capable instructors, this almost unknown place has advantages for the study of anatomy and the theory of surgery, which the large university towns of Germany do not afford.

There is connected with the college a pathological collection, superior far to any in New York, which is kept in excellent order, constantly added to, and well worthy of a visit.

The preparations illustrating hernia are most admirable and complete, and intra-capsular fracture of the cervix femoris presents four specimens, but none of them are claimed as united by bone. Two are distinctly united by callus.

There is quite a collection of aneurismal specimens, also some wax preparations, which for beauty and perfection are hardly to be equalled. They were prepared by a Brunswick artist, now dead.

This college confers no degrees nor honors. There was one American student here during the summer course, and some four or five others.

There are many preparations in the extensive and well arranged Museum, which have been noticed in anatomical and surgical works. The catalogue is very complete, and is furnished to any medical man who wishes a copy.

American Medical Times.

SATURDAY, MARCH 14, 1863.

MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

Chicago, Feb. 20, 1863.

The next regular Annual Meeting of the American Medical Association will be held in the City of Chicago, Illinois, on the first Tuesday in June, 1863. Every permanently organized State, County, and Local Medical Society is entitled to send one Delegate for every ten members, and one additional Delegate for a fraction of more than half that number. Medical Colleges, and Hospitals containing over 100 beds for the sick, are entitled to two Delegates; and all other permanently organized Medical Institutions are entitled to one Delegate each. The Committee earnestly desire a full attendance from all parts of the country.

By order of the Committee of Arrangements.

N. S. DAVIS, *Chairman.*

It is with the liveliest gratification that we announce to the profession the official notice, by the properly authorized committee, of the meeting of the American Medical Association, on the first Tuesday in June next. For two years this Association, once so flourishing and powerful, the pride of the American profession, and the subject of universal respect abroad, has been as completely in abeyance as if permanently dissolved. Great and salutary as its influence had become in binding together its widely scattered members in a common brotherhood, governing them by just and equitable rules, stimulating them in the pursuit of true medical science, and the just arbiter of all their differences, there was great danger that by long inaction this influence would be lost. We have therefore been solicitous that the Association should resume its annual meetings as early as practicable. If the call had been issued for a meeting in last June there is no doubt that it would have been well responded to, and then the history of the Association would have presented a hiatus of but a single year. It has long seemed to us the greatest folly to discontinue the meetings of the Association until peace is restored. It was virtually making a scientific organization but the plaything of chance or political circumstances. The Association has, we trust, a more permanent and more enduring basis, and whatever fortune betide our country the American Medical Association should remain among its most permanent institutions.

It may be well, after this long interval, to recall some of the proceedings of the last meeting, and to remind the committees appointed of their duties at the coming anniversary. The last meeting was held in New Haven, Ct., on Tuesday, June 5, 1860, PROF. HENRY MILLER, of Louisville, Ky., presiding. The number of delegates in attendance was the largest ever known, numbering upwards of five hundred, and representing nearly every State in the Union. The officers elected for the ensuing year were:—for President, the venerable ELI IVES, of Ct.; for Vice-Presidents, WILSON JEWELL, Pa., A. B. PALMER, Mich., JOSEPH A. LOGAN, Ga., JOSEPH N. McDOWELL, Mo.; for Treasurer, CASPER WESTER, Pa.; Secretaries, S. G. HUBBARD, Ct., and H. A. JOHNSON, Ill. President IVES has since died, and the duties of presiding officer at the opening of the next session will devolve on the first Vice-President, DR. WILSON JEWELL. At this meeting the plan of dividing the Association into Sections was first carried out, and added much to the activity and interest of the session. The Sections are four in number, as follows:—1. *Anatomy and Physiology*; 2. *Chemistry and Materia Medica*; 3. *Practical Medicine and Obstetrics*; 4. *Surgery*.

Important action was taken on the subject of medical education, which it will be well for those interested in medical colleges to remember and act upon. After various conferences with the Medical Teachers Association the following resolutions were adopted:—

Resolved, That it is the duty of medical colleges to require of every candidate for the degree of Doctor in Medicine, certificates of study during the full period of three years, under the direction of a regular practitioner of medicine, recognised by the American Medical Association, who shall certify to the same, under his own hand, and of attendance on two full courses of lectures in a medical school, recognised by the American Medical Association, as regularly organized. That no student shall be credited for a second course of lectures, unless it be commenced after the expiration of one year from the commencement of his first course.

Resolved, That every medical college will keep a volume, in which every medical student presenting himself, shall enter his name, his age, the period of his commencing the study of medicine, any diploma he may have received in evidence of previous education, with the name of the college or school from which he received such diploma; and the name of the preceptor with whom he has been studying.

Resolved, That hospital clinical instruction constitutes a necessary part of medical education, and every candidate should be required to have attended such instruction regularly for a period of not less than four months.

Resolved, That the professors of every medical college should recommend to their trustees, or board of managers, the adoption of a rule authorizing them to allow the attendance of two or three delegates, from the State Medical Society, at all examinations of candidates for the degree of the doctorate, and accord to these delegates a vote on the question of recommending such candidates for a degree.

Resolved, That every State Society be recommended to choose proper delegates at its annual meeting, to attend the examination of candidates for the degree of M.D., at all the medical colleges within their respective States.

Resolved, That this Association will not recognise as a regular organization, any college which does not require evidence of suitable preliminary education from all applicants for collegiate medical instruction.

Resolved, That we commend the use of all proper efforts, by which the attention of persons of means and liberal disposition, as well as legislative bodies, shall be directed to the propriety of endowing such medical colleges, and professorships thereof, as shall be recognised by the Association.

Resolved, That this Association recognise as a regularly organized medical college, one which has been represented at any meeting of this Association, and which complies with the preceding rules and directions.

The following Committees for the ensuing year were appointed, and will be called upon to report at the next meeting:—

Committee of Arrangements.—Drs. N. S. Davis, Ill.; J. W. Freer, Ill.; De Laskie Miller, Ill.; E. Andrews Ill.; H. W. Jones, Ill.; Thomas Bevan, Ill.; J. Bloodgood, Ill.

Committee on Prize Essays.—Drs. Daniel Brainard, Ill.; D. L. McGugin, Iowa; M. L. Linton, Mo.; John Evans, Ill; A. L. McArthur, Ill.

Committee on Publication.—Drs. F. G. Smith, Pa.; C. Wister, Pa.; S. G. Hubbard, Ct.; R. G. Breckenridge, Ky; Edward Hartshorne, Pa.: H. F. Askew, Del.

Committee on Medical Literature.—Drs. Frank H. Hamilton, N. Y.; Edward Warren, Md.; Charles A. Lee, N. Y.; J. W. C. Ely, R. I.; E. H. Clark, Mass.

Committee on Medical Education.—Drs. Levin S. Joynes, Va.; Christopher C. Cox, Md.; J. C. Bradbury, Me.; L. H. Steiner, Md.; M. A. Pallen, Mo.

On the Surgical Treatment of the Strictures of the Urethra.—Dr. James Bryan, Pa.

On Drainage and Sewerage of Large Cities, and their Influence on Public Health.—Drs. A. J. Semmes, L.; Cornelius Boyle, and G. M. Dove, D. C.

On Puerperal Tetanus, its Statistics, Pathology, and Treatment.—Dr. D. L McGugin, Iowa.

On Anæmia and Chlorosis.—Dr H. P. Ayres, Ind.

On Alcohol, in its Relations to Man.—Dr. J. W. Dunbar, Md.

On Milk-Sickness.—Drs. Robert Thompson, O.; Oramel Martin, Worcester, Mass.; Wm. D. Wells, Wisc.; S. M. Bemiss, Ky.

On Microscopic Observation of Cancer-Cells.—Dr. George N. Norris, Alabama.

On the Blood-Corpuscles.—Dr. A. Sager, Mich.

On the Hygienic Relations of Air.—Drs. C. C. Cox, Md.; Chas. W. Parsons, R. I.

On Quarantine.—Drs. D. D. Clark, Penn.; E. M. Snow, R. I.; Wilson Jewell, Pa.; E. D. Fenner, La; J. W. Houck, Md.

On Medical Ethics.—Drs. Paul F. Eve, Tenn.; J. A. Murphy, O.; M. L. Linton, Mo.; P. S. Powell, Ga.; B. F. Schneck, Pa.

On Tracheotomy in Membranous Croup.—Drs. A. V. Dougherty, N. J.; George H. Gay, Mass.; J. M. Minor, N. Y.

On the Effect of Perineal Operations for Urinary Calculi upon Procreation in the Male.—Drs. J. S. White, Tenn.; J. B. McCaw, Va.; R. C. Foster, Tenn.

On Mercurial Fumigations in Syphilis—Dr. D. W. Yandell, Ky.

On the Cause and Increase of Crime and its Mode of Punishment—Dr. W. C. Sneed, Ky

On the Microscope.—Dr. R. C. Stiles, Vt.

On Gangrene of the Lungs.—Dr. C. L. Allen, Vt.

On Typhlitis and Peri-Typhlitis.—Dr. J. C. Newman, Tenn.

On the Relations which Electricity sustains to the Causes of Disease.—Dr. Isaac Casselbury, Ind.

On the Morbid and Therapeutic Effects of Mental and Moral Influences.—Dr. Alfred Hitchcock, Mass.

On the Causes of the Extinction of the Aboriginal Races, more especially of the Red Men of America—Dr. George Suckley, N. Y.

To Report on the Practical Workings of the United States Law relating to the Inspection of Drugs and Medicines.—Drs. E. R. Squibb, N. Y.; Prof. J. Carson, Penn.; H. J. Bowditch, Mass.

On the Causes and Treatment of Ununited Fractures.—Dr. E. R. Sanborn, Vt.

On Diphtheria.—Dr. Alonzo Clark, N. Y.

On the Effect of Stimulants in the Treatment of Fractures.—Dr. John W. Russell, O.

On the Dislocation of the Hip and Shoulder.—Dr. Moses Gunn, Michigan.

On International Medical Ethics.—To Investigate the Conditions demanded for a Diploma of Doctor of Medicine. in the various Medical Schools and Universities of Europe.—Drs. J. Baxter Upham, Mass.; Robert Thompson, O.; George C. Shattuck, Mass.; Gustave C. E. Weber, Ohio.

On the Use and Abuse of Pessaries.—Dr. A. K. Gardner, N. Y.

Although the call is issued some months later than was desirable, yet we look forward to the ensuing meeting with anticipations of a large and enthusiastic gathering of the profession from every section of the country, except that blighted by the plague spot of rebellion. And even from many of the Southern states not accessible two years ago, we may now expect delegates. The Army and Navy should be largely represented, as the Medical Departments of both have grown to such magnitude. Their professional interests are identical with those of their brethren in civil life. We would remind medical men in the army that every hospital containing one hundred beds is entitled to two delegates, and that every permanently organized local Medical Society is entitled to one delegate for every ten members. Every medical organization entitled to representation in the Association, should appoint its delegates at as early a day as possible, and notify the Resident Secretary of its action.

THE WEEK.

The Albany papers do great injustice to members of the State Medical Society by reporting and commenting on the papers read before that body. Reporters are notorious for misrepresenting the views of speakers, but when they attempt to report and comment on scientific papers or discussions, they become absurdly ludicrous. Besides, they place honorable physicians in an unpleasant and often disreputable position by parading before the public their names and acts, contrary not less to the sense of propriety which every high-minded medical man cherishes, than to the express rules of all medical societies regulating the conduct of their members. If we or the public were to believe the savants of the Albany papers, conservative surgery was introduced into this country by Dr. Swinburne, of that city, and our army surgeons never heard of it until that surgeon put it in practice at Savage's Station on a patient whose arm was condemned to amputation. The ridiculous statements of the reporter on the success of the operation, the exhibition of the patient to Gov. Seymour, and the desire of the Society to introduce conservative surgery into the army, is in very bad taste. Great injustice is done to Dr. Swinburne by presenting his name and his cases in practice before the public and profession as the apostle of conservative surgery. The Society also is placed in a false position, not a little discreditable. This evil should be corrected by either excluding reporters from the annual meetings, or admitting them under promise of confining their reports to a detail of proceedings.

The people of Boston determined, some time since, to have pure country milk. To accomplish this object, stringent laws were passed, regulating the milk trade, with heavy penalties in cases of adulteration by water or other materials. An inspector of milk was appointed, whose duty was "to give notice of his appointment in the newspapers selected for city advertising, and to request therein all persons selling milk within the city to conform to all the requirements of the law and of this ordinance; and to invite all persons knowing of violations of laws relating to the sale of milk to report the same to him; to prosecute before the proper tribunal all such violations as shall come to his knowledge," etc. This law was apparently hedged about with sufficiently stringent provisions to prevent any offender from escaping justice, and yet, after three years, there have been but sixteen convictions out of forty-eight prosecutions. It could never be proved to the satisfaction of the Court, that the defendant was the identical person who had adulterated the milk, and so, as justice must lean to the side of mercy, the culprit easily escaped. The New York Courts have a much shorter method of disposing of these cases, viz. by deciding that water is no adulteration of milk.

There has long existed a necessity for a complete and comprehensive work on Hygiene in the English language. We have numerous treatises on branches of sanitary science, public health, etc.; but we have no work which may be called a general treatise on this most important branch of medical science. Especially is the want felt by the army surgeon, whose duties principally relate to the hygiene of camps, hospitals, etc. This defect in our medical literature is about to be supplied by Surgeon-General Hammond. Notwithstanding the laborious and exacting duties of his office, the Surgeon-General has found time for the preparation of a general treatise on hygiene, with special reference to the medical military service. From our knowledge of the ability and resources of the author, and an examination of the advance sheets, we are prepared to anticipate a work of no ordinary excellence. The treatise will consist of about 600 pages, large octavo, in the usual excellent typographical execution of Messrs. Lippincott. It will be fully illustrated, and will be issued in about two months.

Correspondence.

THE STATE MEDICAL SOCIETY.

[To the Editor of the American Medical Times.]

Sir:—In the communication from Troy in your last number signed Y, occurs the following:—

"I regret to notice the indifference shown by the nominating committee to the rights and honor belonging to our cherished society. According to the by-laws of the society, no person can be eligible for permanent membership who has not already served as a delegate. Will not the nominating committee ascertain whether all the nominees have complied with this condition?"

The nominating committee did endeavor to ascertain whether a candidate was eligible before nominating him to the society for election; and they have yet to learn of an instance in which they erred. If there are such instances they are not the result of "indifference to the rights and honor of our cherished society," as charged by your correspondent, but rather of the hurry necessarily attendant on the selection of over one hundred and thirty candidates in so short a time.

In continuation of his strictures your correspondent also says, "In the appointment of delegates to represent our society at the annual meetings of sister-associations in other States, we notice another violation of its by-laws. It is expressly provided that the privilege of thus representing our society can be bestowed only on bonâ fide members, and not upon delegates."

Where your correspondent finds in the by-laws any such provision as he gives above I know not, for it was not in the copy used by the nominating committee, and is not to be found in the copy of the by-laws now lying before me; neither has the practice heretofore obtained of selecting delegates from the list of permanent members only, as a reference to the published transactions of the society for the last few years will abundantly establish. If, however, it were to be so, nearly every permanent member would be an officer, as there are only about two hundred alive, and after deducting the *non*-residents, the superannuated, the invalids, and those absent with the army, we should have an office for every one of them.

As a rule, those gentlemen who attend the meetings of the State Society have the best chance of obtaining its honors; and as there are many instances in which persons serve one year as delegates, then resign and are elected permanent members, whilst others serve out the four years of their appointment as delegates without attaining to permanent membership, they are indubitably entitled to the consideration of the nominating committee in the selection of delegates, there being no by-law to the contrary.

One of the Nominating Committee.

An Army Medical Society at Baltimore, Md.—A society has been organized under the name of "The United States Army Medical and Surgical Society of Baltimore," with the following officers:—

President, C. C. Cox, Surgeon U.S.V.; 1st Vice-President, Z. E. Bliss, Surgeon U.S.V.; 2d Vice-President, A. B. Hasson, Surgeon U.S.A.; Recording Secretary, Chas. E. Cady, Assistant Surgeon U.S.V.; Corresponding Secretary, A. A. Woodhull, Assistant Surgeon U.S.A.; Reporting Secretary, G. H. Dare, Acting Assistant Surgeon U.S.A.; Treasurer, L. Quick, Surgeon U.S.V.

Army Medical Intelligence.

SPECIAL ORDERS, No. 87.

War Department, Adj. Gen.'s Office,
Washington, February 23, 1863.

11. So much of Special Orders No. 5, current series, as discharged from the service of the U. S., with a view to his enlistment as Hospital Steward U.S.A., Sergeant James S. McKelvy, Co. G, 123d Penn. Vols., is hereby revoked.

12. Surgeon E. A. Brown, 120th New York Vols., having tendered his resignation, is hereby mustered out of service from January 16, 1863, the date of his muster in, there being no evidence of service rendered by him to the Government.

30. The following assignments are made of Medical Officers:—

Medical Inspector F. H. Hamilton, U.S.A., to report to the Asst. Surgeon-General at St. Louis.

Medical Inspector Peter Pineo, U.S.A., as Medical Inspector, Department of the Gulf.

Medical Inspector G. K. Johnson, U.S.A., as Medical Inspector, Army of the Potomac.

Surgeons W. G. Varnum, J. H. Phillips, and William Goodell, U.S.V., to proceed to St. Louis, Mo., and report for duty to the Asst. Surgeon-General.

Surgeons Daniel G. Brinton and John E Herbst, U.S.V., to report in person for duty to the Medical Director, Army of the Potomac.

Surgeon J. S. Hildreth, U.S.V., to report for duty to the Medical Director at Washington, D. C.

Medical Inspector Geo. H. Lyman, U.S.V., now on duty at Nashville, Tenn., as Medical Inspector, Department of the East.

The following named Medical Officers are hereby relieved from their present duties, and will proceed without delay to join their respective regiments:—

Asst. Surgeon J. F. Pratt, 2d Maine Volunteers, now at Hampton General Hospital, Va.

Asst. Surgeon B F. Hill, 140th Penn. Vols., now at General Hospital, York, Penn.

Asst. Surgeon G. V. Wooten, 27th Indiana Vols., now at Maryland Heights, with 14th Mass. Vols.

Asst. Surgeon W. B. Chambers, 60th New York Vols., now at Smoketown, Md.

37. Surgeon A. B. Shipman, U.S.V., is hereby honorably discharged the service of the United States, on account of disability.

By order of the Secretary of War.

(Signed) L. Thomas, *Adjutant-General.*

ORDERS, CHANGES, &c.

Assistant Surgeon John H. Rogers, 65th New York Vols., now on duty on the defences of Washington, has been ordered to rejoin his regiment.

So much of General Orders No. 19, as dismissed from the service of the United States, Surgeon W. W. Nassau, U.S.V., has been revoked, and his resignation accepted by the President to take effect January 23d, 1863.

The following assignments to duty have been made in the Department of Washington.

Acting Assistant Surgeon Heard, U.S.A., to report for duty at the Finley Hospital.

Assistant Surgeon Harrison Allen, U.S.A., to duty at the Douglas Hospital.

Surgeon W. T. Thurston, 1st Rhode Island Artillery, to the Campbell Hospital.

Acting Assistant Surgeons Joseph Walsh and Benjamin Hodges to the Emory Hospital.

Assistant Surgeon H. S. Schell, U.S.A., to the Judiciary Square Hospital.

Surgeon E. McDonnoll, U.S.V., to the Fairfax Seminary Hospital.

Surgeon J. C. Dorr, U.S.V., has been directed to remove the patients from the Ascension to the Stanton Hospital, and to turn over to the appropriate Departments the hospital property and stores remaining on hand.

So much of Special Orders No. 389, of 1862, as revoked the muster into service of Surgeon G. S. Smith, 101st Illinois Vols., has been amended to discharge him from the service, December 18, 1862, he having been on duty till that time, the vacancy being filled December 19th, 1862.

Leave of absence has been granted to the following officers:

Assistant Surgeon Gardner, 1st Virginia Cavalry, thirty days.

Acting Assistant Surgeon J. H. Case, U.S.A., seven days.
" " " H. F. Condiet, U.S.A., seven days.
" " " Alfred North, U.S.A., seven days.
" " " G. K. Smith U.S.A., fifteen days.

Assistant Surgeon E. Cheney, 14th Maine Vols., having tendered his resignation, has been mustered out of the service of the United States, from November 3d, 1862, the date of muster in, there being no evidence of service rendered by him to the Government.

So much of Special Orders No. 10, current series, from the Adjutant-General's Office, as dismissed from the service of the United States Assistant Surgeon Wm. Carpenter, 5th Kansas Vols., has been revoked, and he is restored to his position, provided the vacancy has not been filled.

Surgeon Jonas P. Safford, 731 Ohio Vols., and Assistant Surgeon Joseph Angle, 123d Pennsylvania Vols., have been dismissed from the service of the United States.

Surgeon G. Grant, U.S.V., has relieved Assistant Surgeon C. K. Winne, U.S.A., in charge of the hospitals at Evansville, Ind.

Surgeon Ira Russell, U.S.V., has relieved Surgeon Barton Darrach, U.S.A., in charge of the Benton Barracks, at St. Louis, Mo.

Surgeon W. Dickinson, U.S.V., is on duty with Davidson's Division, Iron Mountain, Mo.

The General Hospital in 5th Street, Philadelphia, having been closed, Surgeon A. C. Bournonville, U.S.V., has been transferred to the General Hospital in Race Street.

The General Hospital at Knoxville, Md., has been closed, and Surgeon B. Beust is awaiting orders at that place.

Surgeon J. B. Lewis, U.S.V., has relieved Surgeon Geo. H. Oliver, U.S.V., in charge of the General Hospitals at Cumberland and Clarysville, Md.

Assistant Surgeon A. M. Clark, U.S.V., has returned to duty with the 4th United States Infantry, Army of the Potomac, from leave of absence.

Surgeon W. C. Otterson, U.S.V., has been placed on duty as Medical Director, District of St. Louis, Mo

Surgeon A. N. Dougherty, U.S.V., has been assigned to duty as Medical Director, 2d Army Corps, Army of the Potomac, relieving Surgeon J. H. Taylor, U.S.V., who has been ordered to report to the Medical Director, Army of the Potomac.

Assistant Surgeon E. Dodd, U.S.V., is sick in the Officers' Hospital, at Memphis, Tenn.

Surgeon H. S. Hewit, U.S.V., has arrived at Cairo, Ills., en route to the Headquarters Department of the Tennessee.

Surgeon J. G. Keenon, U.S.V., has relieved Surgeon A. B. Campbell, as Medical Director, 16th Army Corps, Department of the Tennessee, the latter having been ordered to report at Headquarters of General Grant.

Medical News.

University of New York, Medical Department, List of Graduates, Session of 1862–3. The annual commencement of the Medical Department of the University was held in the Chapel of the University, Thursday evening, March 5th. Chancellor Ferris conferred the degree of Doctor in Medicine on the following gentlemen:—

Levi J. Alleman, N. Y.; Joseph A. Bates, Mass.; Wm. H. Bates, N. Y.; Israel Bedell, O.; Roswell K. Belden, N. Y.; Thomas W. Bennett, N. Y.; Geo. H. Bowen, N. Y.; Clifford J. Browne, N. Y.; John W. Campbell, Pa.; W. F. Cheney, N. Y.; W. W. Cockerill, Mo.; Bernie Coleman, O.; Wm. A. De Long, N. Y.; Wm. M. Dorran, N. Y.; Edward Dunscomb, N. Y.; W. St. George Elliott, N. Y.; John N. Garnor, N. Y.; Chas. O. T. Gilman, N. Y.; George A. Harrison, N. B.; Benj. F. Hastings, Mass.; Geo. A. Hayunga, C. W.; Phaon Hermany, Pa.; Lyman H. Hills, N. Y.; Chas. Hosford, Vt.; Irving W. Hotaling, N. Y.; Henry H. House, N. Y.; Wm. W. Howard, Mass.; Alex. S. Hunter, N. Y.; Cromwell O. Johnson, Mo.; Calvin B. King, Mass.; John Lynch, N. Y.; Smith H. Mapes, N. Y.; Abram F. McDonald, N. B.; John W. Meeker, N. J.; Henry J. Menninger, N. Y.; Benj. H. Milliken, Ky.; Marshall F. Moore, C. W.; Montefiore J. Moses, Ga.; Lansing Nunson, N. Y.; James E. Neeley, Ky.; Robert D. Nesmith, N. Y.; Homer G. Newton, N. Y.; Wm. J. Orton, New York; James S. Payne, W. I.; Samuel H. Puckett, Miss.; John D. Reynolds, New York; Le Roy Riddell, New York; Frederick Rogers, Connecticut; Jerome B. Tamblin, N. Y.; Richard L. Van Kleek, N. J.; Garahed E. Vartanyan, Turkey; Joseph C. Whitney, Me.; Oscar D. Williams, N. Y.; Alfred D. Wilson, N. Y.; Peter Winter, Pa.; Daniel B. Wyatt, N. Y. —Total, 56.

The Mott medals were awarded to Faneuil D. Weisse, the Gold medal; G. E. Vartanyan, the Silver medal. The Metcalfe prizes were awarded to: First prize, H. J. Devlin; second prize, R. D. Nesmith; second prize, Wm. M. Dorran. The address to the graduates was delivered by Prof. Metcalfe.

Bellevue Hospital Medical College.—The second annual commencement of Bellevue Hospital Medical College took place last evening at Irving Hall. Prof. Taylor administered the Hippocratic oath to the following graduating class, upon whom was conferred the degree of Doctor of Medicine:

Samuel Acheson, N. Y.; Orlando W. Armstrong, N. Y.; James W. Collins, N. J.; Wm. Curry, New Brunswick; Livingston Dexter, N. Y.; Charles W. Deyo, N. Y.; Elijah D. Everhart, M.D., Wisc.; Wm. M. L. Fisk, N. Y.; Philip Fox, Wisc.; Edmund Goldmann, La.; Bradney Griffin, N. Y.; Frank H. Hamilton, Jr., N. Y.; S. D. Humphrey, N. Y.; Geo. N. Irish, N. Y.; Francis Jones, Jr., N. Y.; Alexander E. Jenner, O.; Jordan W. Lockwood, N. Y.; Charles P. Loring, Me.; Alexander D. McGillvary, Nova Scotia; John G. Meachem, M.D., Wisc.; Theodore F. Morris, N. J.; Lewis S. Murray, Nova Scotia; Rudolph Myers, Penn; Thomas L. O'Callahan, Ky.; Henry E. Paine, R. I.; Washington F. Peek, N. Y.; Charles H. Pegg, N. Y.; George G. Percival, N. Y.; Richards S. Potts, Ky.; Orestes M. Pray, N. Y.; George W. Prentiss, Canada; Henry Rockwell, Ct.; David L. Rogers, Canada; Henry M. Sabin, A. M., Mass.; Mason Sheffield, Nova Scotia; J. Coolidge Stone, Mass.; George L. Taylor, New Brunswick; J. Forrest Todd, Ill.; James M. Waddle, M.D., Ark.; Peter M. Wertz, Penn.; Albert B. Weymouth, Mass.; Alexander W. Wheeler, Ohio.

The New York Medical College.—The Thirteenth Annual Commencement of the New York Medical College and Charity Hospital took place, March 11th, in the College building. Rev. T. C. Ewen, of Christ Church, offered the opening prayer, and Prof. Raphael, Dean of the Faculty, administered the Hippocratic oath to the graduates, who received the degree of M. D. from Rev. Dr. T. M. Matthews as follows:—Charles A. Bacon, H. L. B. Hartt, New York; John Friedrich, Germany; H. Baronig Metteosian, Constantinople; Samuel H. Rodman, John H. Thompson, Erastus Wilson, Dubois D. Parmelee, New York; Theodore Artaud, France; David Buchanan, Scotland; Gordon Winslow, New York. Professor Cox delivered the valedictory address, and Prof. J. V. C. Smith awarded the Van Arcken prizes.

The New York Ophthalmic School and Hospital held its Eleventh Anniversary on the 24th ult., in the University Medical College, before a large and respectable audience. The exercises of the evening were introduced with prayer by the Rev. Edward Thomson, M.D., editor of the *Christian Advocate and Journal.* After some introductory remarks by Solomon Jenner, A.M., President of the Institution, the names of the graduating class were read by Dr. Stephenson, who remarked to the president that these young gentlemen were students in the different medical colleges in this city; that they had attended his lectures on Ophthalmic Surgery; had been examined every Saturday during the session by Dr. M. P. Stephenson; had attended the Cliniques at the Ophthalmic Hospital three days in the week, where they learned to diagnose diseases of the eye, observed the effect of remedies, and witnessed operations from day to day. In this institution over 1000 patients are annually prescribed for. The diplomas were then presented to the following gentlemen:—A. E. Jenner, M.D., Ohio; J. M. Waddle, Yates Co., N. Y.; J. P. Schench, Jr., Dutchess Co., N. Y.; W. J. Orton, Broome Co., N. Y.; De Witt Webb, Dutchess Co., N. Y.; J. H. McCann, M.D.; Louisville, Ky.; Robert King, Geneva, N. Y.; H. G Olmsted, M.D., N. Y. City; Jas. Hutchison, St. Johns, N. B.; Chas. P. Sanderson, M.D., Ohio; R. J. P. Mordon, M.D., Canada West; J. H. Chittenden, Binghamton, N. Y.; Thos. Thompson, Delaware Co., N. Y.; G. A. Hayunga, M.D., Canada West; J. H. Hunter, M.D., Concord, N. H.; M. C. Rowland, M.D., Washington Co., N. Y. The graduates were then addressed very appropriately by Marcus P. Stephenson, M.D., one of the attending surgeons, under whose immediate instruction they had been during the winter. The valedictory address, on the part of the class, was by Dr. A. E. Jenner. The closing address, by Dr. Garrish, was well adapted to the occasion.

The Wood Prizes.—The preparations submitted for the Annual prizes offered by Prof. James R. Wood, were examined on Monday the 9th inst. by the Professors of Surgery and Anatomy of the several Medical Colleges. The first prize of $50, was awarded to Garabed Vartanyan, of Syria, Turkey, of the University Medical College. The preparation is a beautiful dissection of the head and neck, showing the branches of the internal maxillary and all the profound arteries of the neck, as well as the superficial. The internal carotid and its branches are all well shown. The petrous portion of the temporal bone is chiselled away, so that the carotid may be seen in its whole course. The five pair of nerves are shown from their origin to their minutest distribution, etc. etc. The second prize was not awarded.

Original Lectures.

OUR SURGEONS UPON THE FIELD.

BEING EXTRACTS FROM AN ADDRESS TO THE GRADUATING CLASS OF BELLEVUE HOSPITAL MEDICAL COLLEGE,

By FRANK H. HAMILTON, M.D.,

PROF. OF FRACTURES, DISLOCATIONS, AND MILITARY SURGERY, MEDICAL INSPECTOR, U.S.A.

It is perhaps proper to assume, Gentlemen, that during the present unhappy war, some of you will choose to enter the service of your country as surgeons in the army. We shall deem it necessary, therefore, to give you a few words as to the nature of your duties in this capacity, and the manner in which they can be best performed.

Possibly your country may yet have need of you in another capacity. You may yet be called upon to shoulder the musket, and to enter the ranks as fighting men. If so, we hope you will not hesitate to respond to the call. Surgeons ought to make good soldiers, having been educated in a Spartan school, where cowardice is accounted a crime. The man who can remain cool and self-possessed in the midst of pestilence, ought to stand well the fire of musketry. Can any one suppose that the forty volunteer physicians who never turned their backs, but who fell with their faces towards the enemy at Norfolk, in 1852, or that any one of those thousands—your compatriots in arms—who have fallen on other fields, have died any less heroically than Warren on Bunker's Hill? or that they would have marched any less steadily upon the batteries at Fredericksburg than did the brave men under Couch and Sumner? We think they were all brave men alike, and alike entitled to public gratitude; and we entertain no doubt that when you are needed for such services you will, under the inspiration of the same patriotism, do whatever is demanded of you.

But it is not probable that you will ever have any other mission upon the battle-field than that of surgeons. Your duty will be to save and not to take life, to bind up wounds and not to make them. You will have, therefore, no distinction to make between friends and foes. You will be employed solely to mitigate the austerities of war, by undoing in some measure the evils which war has done.

It is but justice to say that, by the character and qualifications of those men who have entered the service of the United States, whether as regulars or volunteers, the position of a surgeon in the army has been rendered eminently respectable. We venture to say that no officers, in any other department of the same rank, are more respectable. The surgeons of the regular army have all been subjected, before admission, to an examination as rigid as that which is required for admission to any of the armies of Europe: and their reputation for learning is notorious, and has been the subject of observation and of admiration the world over, among medical men. A defence of these gentlemen would be out of place, when there is no one to dispute their position.

As to the volunteer surgeons it might be sufficient to say that, with few exceptions, they are the only commissioned officers of the volunteer army who have had any previous education or training to the peculiar and respective duties which they have been called upon to perform. With very few exceptions they are graduates of medical colleges, many of them having completed their education in large hospitals. A very large proportion of the brigade surgeons and full surgeons of regiments have been themselves in charge of civil hospitals, or they have been engaged before entering the service in practice, and there is nothing in the experience of a camp, except the mere routine of business, with which they are not perfectly familiar. Among all the surgeons of the army you will not probably find one who was, up to the moment of his entrance upon the performance of his duties, a merchant, a lawyer, a tailor, a shoemaker, a grocer, a saloon-keeper, or anything else, either more or less, than a physician and surgeon.

Moreover, nearly all volunteer surgeons have been subjected to examinations by regularly constituted State Medical Boards, before their commissions have been given to them. In no case which has come to our knowledge has this examination been omitted. While it is well known that at first, and for many months after the war began, no officer of the volunteer service, not in the medical profession, was, in a single instance, subjected to an examination of any kind, nor, in general, were any testimonials required as to intellectual or moral qualifications Nor is there at the present moment any such examination or testimony uniformly demanded. Officers of the line are liable to an examination by a Board appointed for that purpose, upon the complaint of their commanding officers, that they have been found incompetent. And this is all. Medical officers are liable to similar examinations before similar Army Boards.

The presumption is, therefore, established in our favor, and we are happy to be able to verify this presumption by an intimate personal acquaintance with a large number of the volunteer surgeons.

Our official position in the army of the Potomac has given us unusual opportunities of knowing these men, and we think that it ought to be received as a significant fact, that of more than two hundred volunteer surgeons who came directly under our notice, and upon whose conduct it was our duty to report, we have had occasion to recommend for removal but one.

While lying in front of Richmond, by order of the Commander-in-chief, we were directed to assemble the surgeons of the fourth corps, in order that they might deliberate and report upon the causes of the sickness which was then decimating our troops, and to suggest what, in their judgment, were necessary and practicable remedies; and a more intelligent body of men it has rarely been our privilege to meet in any deliberative assembly. Their report, having been received at headquarters, was approved, and most of its suggestions were promptly carried into execution.

It was certainly no part of our intention, when we began to write this discourse, to compose a eulogium upon the medical officers of the army. But since we have spoken of them, it has occurred to us that, inasmuch as their official reports are seldom made public, you possibly may not be aware of what they have been doing: and that by a simple, brief narrative of some of their labors, you may gather certain useful hints as to what you will be expected to do.

The health of troops has always an intimate and direct relation to the sanitary police of the camp.

None understand this better than medical men: since the reciprocal influences of cleanliness, purity of air, and the physical condition of the body, constitute a great part of our medical studies. This knowledge, the result of reading and of experience, physicians have carried with them into the field.

But it must be remembered that it is not in the power of surgeons to enforce hygienic measures without the support of the commanding officers: and they have not always been able, therefore, to apply their knowledge successfully to the management of the interior police of the camps. Indeed, we are compelled to say, that there are but very few of the commanding officers in the volunteer service who understand the relations of these matters as physicians understand them. Our views upon the subject of cleanliness among troops have a much wider scope than theirs. We see in the lack of sanitary police the ultimate defeat and disorganization of our armies.

When garbage lies everywhere in the company streets, and the air has a noisome odor both within and without the tents, we have found, also, that the men are dirty, ragged, and sickly—their muskets are rusty and out of order—they are insubordinate, mutinous, without drill and without discipline. They have no *esprit de corps*—no self-respect—no manliness—no courage; and they will not fight.

These are the links which compose the chain. Dirt at one end, and cowardice at the other—commencing in the camp at Alexandria, and ending in the rout upon the plains of Manassas. They are inseparable—and, in our opinion, whoever is responsible for the one, is responsible for the whole.

"Give me," said Major-General Keyes, when, after our weary march of seven days, we first came in sight of the James river—"Give me the two best regiments in my command. I wish to post them at Turkey's Island Bridge." And after a moment's pause, he added—"the 2d Rhode Island and the 7th Massachusetts." We could have anticipated his choice, for we had inspected their camps often, and we knew from experience that troops whose quarters were always clean, never suffered their reputation to be soiled in battle.

Turkey's Island Bridge was, in some sense, the key to Malvern Hills, where, on the following day, our troops achieved a most brilliant victory, and the exhausted enemy ceased the pursuit.

Col. David A. Russel, who commanded the 7th Mass., and Col. Frank Wheaton, who commanded the 2d Rhode Island, have both been promoted to the rank of Brigadier-Generals, as they well deserved to be; but in our opinion the effectiveness, value, and bravery of these two regiments was no less due to the perfect system of camp police carried out from day to day by Surgeons Holman and Carr, than to the splendid talents of their respective colonels.

We have had equal opportunities, also, of observing the conduct of our surgeons upon the field of battle. We have seen them under fire, deliberately dressing the wounds of the soldiers, or administering to them stimulants, nourishment, and such other comforts as it was in their power to furnish. In the performance of such duties one of my personal friends was killed, and several others have been severely wounded. More than once, in our official reports of battles, we have had occasion to call the attention of the commanding officers to the zeal and intrepidity of regimental and assistant surgeons.

After a battle, also, whether the army has been victorious or has suffered a defeat, the duties of the medical officers continue without interruption. In either case they have usually been compelled to labor incessantly for two, three, or more successive days and nights, without sleep, without rest, and sometimes without food even.

It is well known that both Drs. Milnor and Sutton, exhausted by their labors with the wounded at Savage's Station, finally perished, while in the hands of the enemy, from actual starvation.

On such occasions, also, the surgeons have usually been left alone to do their work. Their nurses, cooks, servants, and orderlies are gone. Their wounded men are in deserted houses, in barns, under sheds or hayricks, or under the shade of a tree upon the open field. They have often no candles, no seats, tables, or beds; no cooking utensils; no food, perhaps, or stimulants. Everything, almost, has to be improvised.

It has often been to us a matter of surprise how much the inventive genius of a surgeon, sharpened by the appeals of those who are suffering, has been able to supply.

A bivouac fire furnishes at night both light and heat: a log is a seat; a fragment of a board is a table; a few tough saplings, laid upon four crotchets, with some leaves, or a blanket, constitute a bed; cold water and words of encouragement are excellent stimulants.

Remember, gentlemen, that to the wounded and fainting soldier, *Hope* is a better cordial than brandy. And that you ought never to omit to offer words of encouragement, when it is in your power to do so.

As for food, it is well enough to know that commissaries are seldom found upon the field, either immediately before, immediately after, or during the battle.

We do not in this remark intend to imply a censure upon these officers. Their duties are laborious and perplexing in the extreme; and in order to answer all the demands which press upon them at such a time they must be ubiquitous. We only intend to state a fact; and to advise you that you will be obliged generally, after a great battle, to feed your own wounded men.

Surgeons have many times during the present war performed such miracles. After the battle of Seven Pines, with 4,000 wounded men on our hands, and with comparatively nothing to feed them, some of the surgeons, by consent of General Sumner, killed several of the horses belonging to his orderlies, and made of them a most palatable and nourishing soup. Others followed the example of Miss Nightingale at Scutari; finding supplies of crackers and of coffee with no commissary to give the required permission to use them, they asked permission of God, and in His name broke open the boxes, and distributed the contents.

Field surgery—that is, surgical operations made under the circumstances which we have now described, has been made the subject of unfriendly criticism, by some who have been permitted to see our patients after they have been carried to the rear.

But intelligent medical men seldom venture to judge of the propriety of an operation, or of the skill exercised in its execution, by the condition of the patient or of his wound after the lapse of several days.

The most skilfully made stumps may ulcerate, slough, and open—the skin and muscles may retract and expose the bone, from faults of the constitution; from the severity of the shock attending the accident; from exposure to heat or cold; from rude jolting over rough roads, or from careless handling on the part of those who move them from place to place.

If, however, it could be clearly shown that there has been a good deal of bad surgery in the army; that operations have not always been judiciously timed, or skilfully made, or the wounds neatly dressed; would it justify the severity of the judgment which has sometimes been given in these cases?

Have any of these gentlemen, who find it so easy, and who feel it so much their duty to point out our errors, ever made an amputation "under fire?"

It is no uncommon thing for a surgeon on the field to be compelled to change his position once or twice during an operation, on account of a change in the direction or in the range of the shots. Such interruptions, together with the urgency of the claims of other wounded men who are lying about, render it necessary to decide quickly and to execute rapidly; and must compel the army surgeon sometimes into errors of practice, which, under other circumstances, he might have avoided.

Parisian Medical Students.—The students, who seem bent on reopening the campaign suspended last year, made a "demonstration" on Monday against their new lecturer, Dr. Rayer. It appears there are two reasons for the ebullition of feeling of which he has been the object; the first is, he is one of the physicians in ordinary to the Emperor; and the second, that his appointment was considered by the students as an act of flagrant favoritism. Be this as it may, Dr. Rayer proceeded to pronounce his opening address on Monday. The hall of the Ecole de Médecine was crowded from an early hour. The moment the lecturer opened his lips a storm of hisses and cries was raised, which drowned the applause of others who did their best to support him. The sergens de ville had to interfere; but their appearance did not at once calm the storm. The bust of the Emperor, which stood on a pedestal opposite the chair, was thrown down; a few say intentionally; others allege by accident, some one having moved a ladder which happened to be near it. The sergens de ville tried to lay hold of the rioters; and after much resistance on their part, succeeded in carrying off the ringleaders in custody, and tranquillity was restored.—*Dublin Med. Press.*

Original Communications.

DISEASES IN CAMP.

THEIR CAUSES AND TREATMENT.

By W. C. OTTERSON, Surg. U.S.V.

MEDICAL DIRECTOR—ARMY S. E. MISSOURI.

[Read before the Kings County Medical Society.]

In considering the diseases to which the soldier is peculiarly liable in camp life, it will not be out of place to glance at the peculiar conditions superinduced by his habits. No surgeon can have been connected with the army, and noticed its deteriorating influences upon the physical man, without observing the almost universal Dyscrasia that is connected with every form of morbid change to which the human system is subjected: the emaciation, dusky hue, and shrivelled cold surface, of almost every soldier sick in Hospital, or who waits at Surgeon's call, is the one great predominating characteristic, no matter what may be their complaint. Diarrhœa, intermittent and remittent fevers, in this country, are the most frequently met with. We commence by what we suppose to be the cause of the pathological changes in the system; these we shall find for the greater part to be functional, and not organic. Our volunteers are taken from all branches and occupations in life, connected with the arts of peace; they have all shared in what has been our happy and prosperous country, the comforts of a good home, protected from the cold in winter by comfortable houses and clothing; from the intense heat of summer by a degree of leisure that their prosperity can well afford; their diet of the most healthful and extensive varieties that their appetites can crave; a climate, although extending several degrees of latitude and longitude, that with few exceptions is remarkably healthy and salubrious; add to these the daily regular habits of routine civil life, and we have the true type of the great class of our soldiers.

We will follow the private soldier from his private home of plain comforts, to the field. Here is a revolution in everything; he rises in the morning ere the stars have faded, chilled and sore, from his comfortless bivouac; prepares his morning repast in haste, often one half cooked, and thrusts a villanous compound of solids and fluids into his stomach, in the shape of fat pork fresh or salt, always fried, soft bread always heavy, hot coffee always strong, and in undue quantity, taken for its heating and slightly stimulating effects. With this, the order comes to "fall in!" and with knapsack and musket, his whole muscular and nervous energies are taxed in locomotion; the processes of digestion are interfered with; and notwithstanding the stomach has been taxed beyond its powers, very few of the elements of nutrition are carried into the circulation. His march continues for many weary hours, when he halts for the night, or throws himself beside the road, from mere exhaustion: in either case, the capillary system in its most active stage, and the nervous energies flagging; his supper is a repetition of his breakfast in all particulars; when finished, he seeks "tired nature's sweet restorer, sleep," with stomach filled to repletion; the chill night air soon closes the delicate capillaries, and the cutaneous excretions seek some new exit; thus the mucous membranes as the great scavengers are called upon to perform, and this labor is shared by the bronchi and gastro-intestinal canal; the latter having already become exceedingly embarrassed by the ill-treatment just sustained, goes to work in self-defence, and rids herself of the irritating matters contained within, that have escaped the process of assimilation. Add to these, scanty covering while sleeping, the insidious deleterious influences of noxious gases exhaled from the earth at night, and crowded tents, sapping the very foundations of life, by robbing the system of her red corpuscles; and we have the soldier as he presents himself in hospital, or at surgeons' "call." My professional readers will readily recognise the photograph, as I will attempt to give it, of one of our patients, and as our very distinguished and worthy Professor of Theory and Practice, J. M. Smith, used to teach in examining a patient, always begin at the head, if there is any obscurity in the case. We will first begin outside, and examine the skin; the first casual glance of the novice would suggest soap and water as the treatment, the diagnosis being inferential; but the experienced eye knows this opinion to be premature: take hold of your patient's hand, 'tis cold, almost clammy, he is emaciated, and muscle flabby, his features are sunken, and his surface cyanosed, his sclerotic is almost pearly, his conjunctiva pale, his lips colorless, his tongue large and flat, with a fur lighter than a cream-color; the paleness of the mucous membranes strikes you at once; his pulse is quick, small, and irritable, the rhythm of his heart is irregular and impulse feeble, respiration is accelerated, and his whole expression is anxious, and indicative of debility; the spleen is generally found enlarged, liver unchanged, but sometimes tender, the bowels flat or tympanitic, as the case is more or less acute, or chronic with or without tenderness upon pressure. Pains are erratic, all of a neuralgic character. The cardiac plexus and the semilunar ganglion appear to be great centres of reflected irritation. These are called Rheumatism. Upon questioning the patient of whatever he may complain chiefly, before he gets through relating his ills, he is sure to tell us he has diarrhœa, and pains in the chest and back; these last, in my experience, are always more aggravated in the cavalry than in the infantry service. No external remedies, so far as I have observed, have in the least degree mitigated them.

It may not be out of place here to mention the different kinds of diarrhœa, and the indication of their treatment. When there is much pain, and the dejections are small and frequent, caused by irritating substances within the intestinal canal, a cathartic or aperient will often correct the whole trouble; when the stools are semisolid, or fluid with light unhealthy color, copious and frequent without pain, caused by anæmia, and debility of the muscular fibres of the canal, the vegetable bitters, in alternation with the iron, act as a direct tonic to the muscular fibre of the intestine, while they improve by stimulating the processes of digestion. The best of this class are the calumba, the quassia, the gentian, etc., given in the form of tincture. The periodic diarrhœa is purely of malarious origin, and to be treated accordingly: quinine and iron is the best combination. When camp diarrhœa becomes thoroughly chronic, structural changes are so extensive that little can be done that is curative; the bismuth and carminative powder, the nit. argent. and conium or opium with milk diet, and stimulants fulfil the indications.

In all these cases the pathological condition of our patient is evident; he is not getting into his circulation a due proportion of the proteine compounds, and he is simply *starving to death:* this is a startling fact.

In this country we are not familiar with cases of starvation, for although all parts of our land do not exactly flow with milk and honey, it is supposed to furnish ample subsistence for all the wants of the animal economy; and this fortunately is true, for this man takes into his stomach his pork and beans, and corn bread, and yet fails to extract from them the elements of bone, muscle, and nerve, and thinking brain.

Is the Government to blame because a man's digestion is bad? Is the surgeon to blame that his pills and powders do not cure his patient? Or is a man to blame because he is not an ostrich? The answer to these interrogatories is palpable to every one. Still the Government is very much to blame in not having made the subject of proper food, and its preparation, for the soldier in the field, one of close, careful, and thorough investigation. Every day in the year, with such an army as we have, there is a whole regiment lost for want of that attention to cooking which is so essential to healthy vital action. The only thing attempted in that direction was the Portable Oven, which I believe was a private enterprise; this was a step in the right direction, but was soon abandoned. This I look upon as unfortunate, for if these were imperfect, some one would soon have made improvements that would have given the soldier his food well cooked and easily digested, with a cost to the service much less than the present, where at least one third of the ration is wasted. Who will confer this great blessing on our Army, immortalize himself, and make his fortune? This, then, is the great indication, and will for ever lay prostrate at our feet the hydra-headed monster, whose shadow falls with talismanic influence on the march of all great armies.

In view of these facts, what is the duty of the Surgeon? Obviously first to his poor patient, he will as far as possible correct the abuses of his digestive organs, in directing such food as their enfeebled condition can elaborate. Solid, or semi-solid, as a rule, will meet the indication far better than any soups or broths he is able to improvise: a beef-steak broiled on the coals, cooked sufficiently on the outside to retain the nutritious juices; rice well boiled, and if possible baked potatoes, stale bread, or hard bread in preference to the hot-biscuit, or "slap-jack," that is such a favorite with the soldiers (these are a griddle-cake cooked generally in pork-fat, and are as indigestible as gravel-stones), coffee weak, and in small quantity, that the gastric juices may not be diluted, milk and farina if possible to be obtained; a dry place to keep your patient, with sufficient clothing to protect the surface from sudden changes; an occasional tepid or cold sponge bath, containing sufficient salt to stimulate the skin; and we have as much of hygiene as can be brought to bear in the field. Now, how shall we medicate our patient? He has chills, he has bronchitis, he has diarrhœa, he has what he and many of the surgeons call rheumatism, he is anæmic, he has engorgement of his spleen, and torpor of his liver: in a word, his machinery is not working at all, or is working wrong.

The first indication will be to clear the primæ viæ of all irritating substances; if we have a congested condition of the mucous membranes, the sulph. magnes. meets this indication, if not the ol. ricini, or ol. olivæ; we will suppose that intermittent fever is the predominating feature of his disease, as he presents himself. We must control this; in the West our surgeons are in the habit of giving, without any discrimination, sulphate of quinine in doses from ten to twenty grains every few hours; this breaks the chill, but leaves the patient cinchonized, and the nervous forces stunned; fortunately nature protects herself against these rude assaults of the doctor, and carries off by the bowels a large portion of the offending drug. In view of the perverted action of all the emunctories, what appears the most rational form of treatment?

I have invariably succeeded in controlling the chills and leading back the glandular and nervous systems to their healthy standard, by the administration of much smaller doses of quinine. A formula as follows:

℞. Sulph. quinini ℈iss.
Pill. mass. hydrarg. grs. xii.
Ol. capsici gtt. vj. ♏.
Ft. mass. in pil. No. xij. divid.

One pill every four hours in the absence of fever, or they may be given without intermission.

The stimulating influence of this combination corrects the intermittent, the morbid secretions, and lays the foundation for the introduction of the one thing needful into the circulation, *iron*.

Here we must respectfully differ with the sages, who, in our government supply table, furnish us but two preparations of iron, neither of which can be used in these cases to advantage; they are the sol. persulphatis and the tinctura chloridi ferri; the latter is the only form that we have now for internal use, and its irritating properties render it entirely unfitted for use in this class of cases. This is the rule, no doubt exceptions do obtain.

I took occasion to mention to the Surgeon-General this deficiency in our supply-table, but, to the best of my knowledge, it has not been as yet remedied.

As a result of the combined enervating influences upon the soldier in the field, and the limited means of combating the same, all our cases are *typhoid* in their character; and he who carries with him from civil life his antiphlogistics in the phlegmasia, and adopts the same line of practice, will fail to cure his patient, but will not fail to kill him, unless his patient has unusual powers of vitality.

Thus the great rule of our practice to be followed must be *tonic* and *stimulating*. Tart. antim. et potass., aconite, veratria viride, may all be stricken from the list with great advantage to the sick soldier, and to the service. These remedies are largely supplied, and, I regret to say, used largely and indiscriminately. I have seen after amputation at the upper third of the thigh, where the powers of life were flagging and the pulse small, thready, and 130, the surgeon giving large doses of Norwood's tincture veratria viride, and wondering that it had no marked effect in reducing the circulation. I have seen in cases of broncho-pneumonia, the sequence of rubeola, the surgeon giving, with the greatest diligence, tart. antim. et potass. with the patient's surface cold and blue, his pulse past counting, his dejections involuntary, and his muscular system so far relaxed that he could not keep his mouth shut; still they had strong hopes of subduing the inflammation; but I never followed the case that they failed to accomplish their object (at least in part) but it is on the principle of those surgical operations that are perfectly successful, but the patient dies.

Now our respected and honored masters in solemn conclave have decided that ten ounces of sulphate of quinine is all that a regiment of one thousand men shall have in three months; this change is perhaps well enough, the mistake is placing it into the hands of men who have been using that quantity in just ten days; they must now be changed, and men placed in their stead, who can use the amount allowed with at least as good success as in the old supply, which is thirty-two ounces. Fowler's arsenical solution cannot be used as a substitute for the quinine on account of the increased irritation it produces, as the intermittents are always accompanied with diarrhœa. An interesting fact throwing light on this subject is, that, in this section of the country (Missouri), our waters are strongly impregnated with *arsenic* held in solution, and giving rise to many cases of enteric fever and gastro-enteritis.

An additional argument in favor of iron. We should have added to our supply table more preparations of iron, the pulv. ferri, the vallet mass., the precip. carb., the citrate of iron; then our intelligent army surgeons would feel as though they had the means to meet the diseases with which they come in contact.

The promise of a sufficient supply of anything that might be required by stating *reasons*, has entirely failed to accomplish the laudable object for which it was intended.

The facts are evident, and every surgeon in charge of a regiment or hospital in the west, if away from the large cities, will sustain me in my assertion. I trust that the exponents of our profession, and its heads in the army, may come out and place the profession in the army upon a sound and scientific basis; that the name of army surgeon may be an honor, and that they may compare favorably with our brethren in civil life. Let us have the proper relative rank, and let us deserve it by our intelligent, rational, and scientific course. Who will raise the standard of the army surgeons of America? The true surgical history of this man I fear, if written, would make the cheek tingle, not only of the intelligent army surgeon, but the profession at large in our country.

One word in regard to the administration of astringents in these cases of diarrhœa, and I close. The acetas plumbi, the tannic acid, krameria, kino, and opium, almost all act badly; frequently increasing the irritability and tormina, but seldom controlling the peristaltic action of the intestines, lessening or improving the character of the dejections. A full dose of pil. mass. hydrarg., followed by oleum ricini is, probably, the best remedy as a rule. The sulphate of magnesia where there is much congestion; the rheus and hydrarg. prot.-chloridi, followed by a Dover's powder, or a dram of tinct. opii comp. at night. Alcoholic stimulants are always powerful auxiliaries; these, with the proper hygienic management, such as indicated, will comprise nearly the whole treatment before the tonics are given; but if the region be a limestone one, and the reaction of the water strongly alkaline, then the mineral acids may be used with advantage.

If army surgeons are unsuccessful in the treatment of the diseases arising from anæmia, it is but fair that our brethren in civil life should know that we have nothing but muriated tincture of iron as a mineral tonic, to supply the deficiency of iron in the blood, upon which the disease principally depends.

Hoping that these remarks may be the means of attracting the attention, and inciting to action those who are intrusted with these important matters, and that they may supply the necessity so generally conceited, I am induced, for the sake of the poor sick soldier, and for the reputation of the army surgeons, to be thus earnest.

EXPERIENCES IN MILITARY SURGERY.

By DAVID P. SMITH, Surgeon Vols.

SURGEON IN CHARGE OF FAIRFAX SEMINARY HOSPITAL.

EXSECTION OF SHOULDER.

Exsection of the hip I pass over, as no case of it in military life has fallen under my notice, and proceed to the consideration of exsection of the shoulder. A case of gunshot fracture of the head of the humerus, reported some twelve years ago in the *London Lancet*, made a strong impression upon me, and caused me to yield a ready assent to Mr. Guthrie, when he said the upper extremity was *almost never* to be amputated for gunshot wound.

The case briefly was this:—A gun-shot fracture of the head of humerus, so as to render partial exsection necessary. Buckshot lying in the axilla, by ulceration, causes profuse hæmorrhage, which necessitates the ligation of the subclavian artery. In spite of this complication recovery ensues, and a useful arm is preserved. I exsected the head of the humerus, with about three and a half inches of the shaft, in two cases, after the battle of Mill-Springs. One died, and one got well, and had, as I afterwards learned, a useful arm. Both were secondary operations, and the humerus in each was literally *smashed*. In the fatal case, death resulted from the non-performance of the operation soon after receipt of injury. The mere introduction of the finger into the wounds should have been enough to lead to instant operation. I may be pardoned for remarking that I once saw so eminent a surgeon as Mr. Syme, of Edinburgh, excise a sound head of the humerus, and, after some confusion at this unexpected apparition, discover that his deceitful probe had encountered a carious acromion process. The finger is, after all, the only probe worthy the name; it is always *at hand*, and rarely deceives.

I exsected large portions, say from three to four inches, of the entire shaft of the humerus in two cases, after Mill Springs, and was gratified to learn afterwards of their having good use of the arms—probably only of the fore-arm, for false-joint must, I judge, almost necessarily occur, when so much of the humerus is removed.

CASES OF MILITARY SURGERY.

By H. W. DUCACHET, Surg. Vols.

IN CHARGE OF SEMINARY HOSPITAL, GEORGETOWN, D. C.

1. *Strange Case of Gunshot Wound.*—Richard B. Seybert, private, Co. C, 90th Regt. Penn. Vols., before going into action at the last Bull Run battle, Aug. 30th, converted his tin cup into a pail, by putting to it a bale of wire, one-sixteenth of an inch in thickness, and fastened it to his belt, on the right side. A minié ball struck the wire, tying itself in it, tearing it away from the cup, and then entered the body (carying the wire with it), about two inches above and in front of the anterior superior spinous process of the ilium, passed under the abdominal muscles for about eight inches, and lodged, with the short end of the wire protruding from the skin, an inch to the left of and below the umbilicus, and was removed from its position by the knife.

The integuments at the point of entrance were very much torn, the opening being large enough to admit the four fingers. In January last he returned to his regiment.

2. *Case of two Femoral Arteries in one Leg.*—Henry Klumpater, private of Co. I, 8th New York Vols., received a shell wound, Aug. 30, 1862. The patella and outer condyle of the femur, with a considerable portion of the tibia, were carried away. He was admitted Sept. 9th into Fairfax Seminary Hospital. Amputation was performed Sept. 17th, under chloroform.

On account of the enormous size of the leg from swelling, and the difficulty which always exists in controlling hæmorrhage with the tourniquet where such is the case, it was thought best to secure the femoral with a ligature before amputating; this was accordingly done by Dr. D. P. Smith, the surgeon in charge. On making the section of the upper flap, an artery of the size of a large quill was found to bleed.

The patient died on the 21st, and dissection showed the existence of two femoral arteries. The one that had been tied was in its natural position, with the profunda given off at its usual place; the other was of nearly the same size, and given off below Poupart's ligament. The two were distant from each other at the point of ligation, about two inches.

Reports of Hospitals.

BELLEVUE HOSPITAL

AMPUTATION AT THE SHOULDER-JOINT—SECONDARY PLEURISY—DEATH.

[Reported by W. F. Peck, Senior Assistant to 1st Surg. Div.]

Patrick Mullan, æt. 30; native of Ireland; single; discharged soldier; was wounded at an engagement on Aquia Creek, Jan. 29, 1862, through the upper third of the left arm, the ball passing anterior to the bone under the superficial fascia of the breast, coming out near the left nipple. He was admitted into Bellevue Hospital, Aug. 16, 1862. At the time of his admission the wound was not of a serious nature, through there was some periostitis of the brachium, and very little necrosis.

About the middle of September a load of sick and wounded soldiers was received from Fortress Monroe, many of whom had gangrene; the wound in a few days changed its appearance very much; ulceration set in, accompanied by hospital gangrene, both of which progressively increased up to Oct. 20th, when secondary hæmorrhage from the brachial artery occurred; the bleeding vessel was secured, but not until some twenty ounces of blood were lost. Dr. Parker was called, but ordered the parts to remain untouched until the next day.

The following day a consultation was held between Dr. Stephen Smith and Dr. Parker. Owing to the extent of the gangrene and necrosis, they determined to remove the arm at the shoulder-joint.

At 1.30 P.M. Dr. Parker, assisted by Dr. Stephen Smith, proceeded to perform the operation. The patient was etherized, and the usual flap operation performed, hæmorrhage being avoided by compressing the subclavian artery; very little blood was lost, but at the termination of the operation the radial pulse was barely perceptible; stimulants were freely given, and the patient rallied in about half an hour.

Oct. 22d.—Pulse small and feeble; no pain; wound looking well; patient much exhausted. Treatment.—Brandy ℥ ss.

every half hour with beef-tea. 23d.—Pulse 100 and stronger; tongue clean and moist; eats very little. The process of suppuration is being established; treatment the same with the addition of ℞. Quiniæ sulph. ʒj., Hoffman's anodyn. gtt. xxx.; tr. cinch. comp. ℥ ij.; acid. sulph. arom. ʒ ij.; M.; S. teaspoonful every three hours. 25th.—Symptoms and treatment same as Oct. 23d. 26th.—Pulse 120 and soft; respirations 28; sharp pain in right side; auscultation gives friction sound, percussion sound normal; no appetite; bowels constipated; frequent vomiting; wound suppurating freely, but not looking very well. 27th.—Pulse 130; respiration 30; surface clothed in a cold clammy perspiration; pain in chest continues, through less lancinating; friction sound absent; percussion gives dulness over the lower third of right side. 30th.—Pulse 120; respirations 25; skin moist; tongue moist and furred; bowels move daily. The dulness is increasing, wound freely suppurating. Brandy ℥ x during the twenty-four hours. Nov. 1st.—Pulse 120 and feeble; surface moist; bowels loose. The normal vesicular murmur is absent over the lower two-thirds of the right side; flatness marked; absence of vocal fremitus; some cough. 2th.—Pulse 104 and feeble; bowels normal; tongue furred; appetite not very good; thoracic symptoms same as yesterday; changed to water bed on account of two small bed sores over sacrum. 4th.—Pulse 128; respirations 28; surface covered with a cold clammy perspiration; fluid in chest increasing, no pain; lies quiet in bed, looking well. Brandy freely given. ℞. Quiniæ sulph., grs. vi.; pulv. opii, grs. iij.; M. Div. in chart no. vi.; S. one every hour. 5th.—Respiration, 50 to the minute, pulse hardly perceptible at the wrist; surface cold, and clothed with a profuse perspiration; tongue dry; unable to retain anything on his stomach. Died at 1 P.M.—*Autopsy* twenty-four hours after death. The left side of chest filled with fluid compressing the lung into a small mass. Lungs, heart, and kidneys healthy.

Progress of Medical Science.

PREPARED BY E. H. JANES, M.D.

NINE CASES OF PLACENTA PRÆVIA

Are reported to the British Medical Association by George Rigden, Esq., Canterbury. Statistics show these cases to be rare, and but few fall to the lot of any one practitioner. In 75,596 cases of midwifery recorded by nineteen observers, 182, or about one in 420, were cases of placenta prævia. Naegele ascertained by means of the stethoscope, that of 600 cases of impregnation, the placenta was attached to the os uteri in 11, or about one in 55 cases. This will probably account for the many miscarriages that occur about the fifth or sixth month, and which are probably due to this position of the placenta. According to Churchill, in 182 cases of placenta prævia, the result to the mother was fatal in 51, or about one in three: and it is very rarely that the child can be saved. Of these nine cases, the first, a woman aged about 40, and the mother of several children, had been flooding at intervals for more than a month past. The placenta was found attached completely over the os uteri, and so thin that the head was distinctly felt in the natural position through its substance; it was therefore punctured with the finger, and the head immediately descended through the aperture, and the case quickly terminated by the natural efforts. The child was still-born, the mother made a good recovery. The second was a primipara, aged rather more than 20, and about eight months advanced. Flooding had occurred at intervals for several weeks past. Placenta completely over the os. Was delivered by turning. The child was still-born. The mother died of sub-acute peritonitis. The third, a multipara aged about 40, had been subject to flooding for several weeks. The placenta did not quite cover the os. Delivered by turning, the child still-born, the mother recovered with some paralysis of one leg that lasted for several months. The fourth a multipara aged 30, had flooded for a few days. Placenta implanted over the os, and partially protruding. It was at once removed, when the child was found to present by the shoulder, and was at once delivered by turning. The child was still-born, but the mother made a good recovery. The fifth, a primipara aged 20; the placenta partially protruded, it was seized, and delivery at once effected. The child was living, but being premature and weakly, it soon died; the mother made a good recovery. The sixth, a multipara aged about 40, and about the seventh month of utero-gestation; had suffered from intermittent floodings. Upon the occurrence of labor, the placenta was entirely over the os. It was partially separated from the side, and the child, delivered by turning, was still-born, and the mother made a good recovery. The seventh, a multipara aged 30, had arrived at full term of pregnancy. Flooding had occurred at intervals for some weeks. Placenta entirely over the os. It was detached and removed, and the flooding ceased or lessened; but the pains not being sufficient to expel the child, it was removed by turning. It was still-born, the mother recovered. The eighth, a multipara aged about 40, was in the seventh month of pregnancy. The placenta presented, the child was delivered by turning, lived several weeks, and the mother did well. The ninth, a multipara aged 35. Placenta entirely over the os, child, delivered by turning, was still-born, the mother made a good recovery. The author's concluding opinion is that, "in those cases in which the placenta is partially protruded through the os uteri, and consequently offering but little difficulty in its separation, we are justified in removing it before the child; but since in all cases it is of the greatest importance to effect the delivery as soon as the os will permit, and before the power of the mother becomes exhausted, the delivery of the child is of greater importance than the delivery of the placenta, and, therefore, should in the greater number of cases be effected."

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, Nov. 26, 1862.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

MISCELLANEOUS SPECIMENS.

Dr. Conant presented a small double-headed snake which had been found in one of the fields of Maine, and presented to the medical school of that State. He remarked that the same institution had in its Museum the skeleton of a double-headed sheep which had evidently arrived at the adult age. In that instance, the three upper cervical vertebræ were double, while the fourth vertebra had two openings anteriorly communicating with the common canal.

He also presented a mammary tumor removed from a woman 60 years of age. It had first made its appearance two years before, but during the last four weeks had increased about two-thirds of its former size. It was fibro-plastic in character, and was simply developed in the areolar tissue at the outer edge of the left breast. There were no adhesions. The wound healed readily, but in the course of three weeks a little tumor showed itself, and rapidly increased to the size of a hen's egg, involving the skin overlying it. Dr. C. proposes to remove the tumor a second time.

The third specimen was also a mammary tumor removed from a lady of Brooklyn, three weeks before. It had been two years in growing to the size of a hickory-nut, but during the three weeks preceding the operation had increased in size very rapidly. On microscopic examination, it was found composed of round cells, but no nucleoli. There was also a considerable development of fibrous tissue throughout the growth. The wound healed readily.

DILATATION OF VULVO-VAGINAL DUCT.

A fourth specimen exhibited by Dr. Conant consisted of a small portion of the walls of a sac formed by the dilatation of the vulvo-vaginal duct, the orifice of which had previously become closed. The tumor had existed for twelve years, and at four different periods had become the seat of inflammation and ulceration, discharging a sero-purulent fluid. Gradually increasing in size, it became to her a great source of inconvenience, and it was accordingly removed. In its removal, it was found adherent to the mucous membrane at the margin of the labium, in consequence of which a small opening was made into the sac, rendering the completion of the operation more difficult than it otherwise would have been. The wound healed readily.

SPECIMENS OF KNEE-JOINTS REMOVED BY EXSECTION AND BY AMPUTATION.

Dr. Bauer presented twelve specimens. The first consisted of portions of a knee-joint previously exhibited to the Society at the meeting on the 6th of January last. They were a second time presented to the Society in company with the patient from whom they were removed. The operation was performed on the 24th of October last year. The limb was shown to be somewhat shorter than its fellow, but the union of the sawn portion of bone was perfect, and allowed the patient to get about very comfortably, save with a slight halt.

The second amputation was also that of a knee-joint removed by amputation from a grocer who was carried along with a runaway horse. The synovial capsule had been fractured in several places, and being seen shortly after the accident by a homœopathic physician, the wounds were brought together leaving several pebbles in the cavity of the joint. Three weeks subsequently Dr. Bauer first saw the case. The limb was then very much swollen, and was the seat of very severe inflammation. The wound was opened and all the foreign matter removed. But the amount of destruction to the joint was so great that amputation was the only resource. The operation was performed on the eighteenth day after the injury. The point of interest consisted in the remarkably short time in which an almost entire destruction of the articular cartilage was produced. In some places the bone was actually bared.

The third specimen consisted also of a knee-joint, removed by amputation. The patient had suffered from white swelling for eight years, and at the time Dr. Bauer saw the case there were several openings in the neighborhood of the joint. The probe struck dead bone in every direction. Exsection was then proposed, but the patient refused the operation. Subsequently, however, consent for the operation was obtained, but on cutting down upon the parts the condyles of the femur and head of the tibia were the seat of extensive softening of the bone tissue, so that it would have been necessary, in order to get rid of all the diseased tissue, to remove at least three inches of bone substance. This, however, was considered impracticable, and amputation of the thigh was accordingly performed. No tubercular matter was discovered in any of the softened tissues.

Mr. Gunning, Inspector-General of Army Hospitals died on Sunday morning, at his house in the Rue du Colisée, Paris, in the ninetieth year of his age. He was probably the only surviving pupil of John Hunter. He was in St. George's Hospital at the time of Hunter's death, and walked at the side of the sedan chair in which Hunter was conveyed to Leicester Square. In 1793, he was elected a Member of the College of Surgeons; and in 1800 was elected surgeon to St. George's Hospital, which office he resigned in 1823. He was attached to the medical staff of the Duke of York's army so far back as 1792, and resumed active service on the outbreak of the Peninsular war. He was also present at the battle of Waterloo, where he amputated Lord Raglan's arm.—*Brit. Med. Jour.*

American Medical Times.

SATURDAY, MARCH 21, 1863.

MEDICAL PROVISION FOR THE ARMY.

As the military campaign of 1863 is about opening, it becomes a matter of serious inquiry with the people—Will the preparations for the sick and wounded be adequate to the service required? The qualifications of the surgeons of the army to perform properly their duties both in the prevention and cure of sickness, and in the emergencies of the battle-field, have been the subject of a vast amount of discussion. The people have been exceedingly sensitive in all matters touching the care of the sick and wounded, and have, as a consequence, readily given credence to any and every report of negligence or incompetency of medical officers. There is no doubt that in the first draught upon the profession for a supply of regimental surgeons many incompetent medical men found their way to the ranks of the army. The hygienic condition of the early camps and the treatment of the wounded after the first sanguinary battles abundantly and painfully proved this fact.

The effort that was put forth by the people to meet the pressing wants of the sick and wounded will form one of the sublimest chapters in the history of the great struggle. Individuals, voluntary associations, and State Governments vied with each other in lavishing upon the hospitals the choicest supplies, and in furnishing assistants, nurses, etc. The medical profession in civil life volunteered its aid in every emergency, and on many a battle-field and in most of the hospitals its services were cheerfully and gratuitously rendered. It is impossible to estimate the good which was accomplished in the relief of human suffering by these charitable works. They supplemented the more systematic labors of the Sanitary Commission, and supplied a want for which no available means were then adequate.

But in the progress of the war we have made great advances in the military medical art. The medical department of the army has undergone thorough revision, and has been placed on a most effective basis. At the head of the department has been appointed one of the most capable officers in the service, who combines in a single person high scientific attainments, a practical knowledge of the duties of every medical officer, a conscientious regard for duty, a patriotic zeal in its performance, and that mental and physical activity peculiar to middle life, and indispensable in a chief military officer. The medical staff has also been enlarged by the addition of a corps of inspectors, and by an increase of the number of surgeons and assistant-surgeons, and medical cadets. This expansion of the medical department in most respects equals the wants of the service, whether in the field or in hospitals. The appliances for the proper care and treatment of the sick and wounded have multiplied indefinitely, and seem adequate to meet promptly every emergency. Another important feature in the improvement of the medical staff, increasing its efficiency, is the introduction of the ambulance corps in many divisions of the army. We hope to see this system thoroughly organized and perfected. Finally, the character of the medical staff has been greatly elevated by the

Medical Boards instituted by the Surgeon-General for the examination of regimental surgeons alleged to be incompetent. A large number of inefficient persons have thus been culled out and discharged.

The country has every reason to be satisfied with the present efficiency of the medical department of the army. In all its appointments it will be found adequate to the service required, however great the pressure may become. Sickness, privation, suffering, and death, must exist in spite of the best regulations where large armies traverse extensive districts, and are exposed to the destructive influences of climate, and frequent and unexpected battles. But so far as human power can control these agencies the Surgeon-General and his staff are fully prepared to meet and cope them. In many divisions of the army the medical organization has reached great perfection. We may remark, not invidiously, that the medical corps of the army of the Potomac has been organized by Medical Director Letterman on a plan that renders it entirely adequate to all the exigencies of the battle-field.

But in this review of the preparations for the care of the sick and wounded on the part of the Medical Department during the approaching campaign, we must not lose sight of that powerful arm, which, in harmony with the will of the Surgeon-General, dispenses the charities of the people with nice perception of their wants to the sick and suffering. The Sanitary Commission, the handmaid of the Medical Department, a noble charity, has so enlarged its means of usefulness as to bring the benefactions of the people to the humblest and most obscure soldier in the service. No voluntary, State, or other organization can so effectually accomplish the distribution of supplies to the sick. It has enlarged facilities for transportation, an immediate knowledge of the wants of every corps of the army and every hospital, and acts under the direction and supervision of the Surgeon-General.

We have been led to review the provisions made for the opening campaign for a two-fold reason. First, we desire to discourage all movements on the part of state authorities, designed to render medical aid to the soldiers from their respective States, not entirely subordinate to the medical department of the army. Whatever may have been the necessity of extraneous medical assistance during the past year, we are satisfied that no such necessity will hereafter exist. The medical department in its new organization, enlarged and perfected, will prove abundantly adequate to whatever emergency may occur. Evil, and only evil, can result from independent State action. The inevitable clash of authority would tend to engender bitterness, violence, and perversion of the appointed means.

A bill will be found on another page which has been introduced into the Legislature of the State of New York, designed to create a medical agency for the care of soldiers in this State, resembling, we presume, in most of its features, similar measures presented in other State legislatures. A more objectionable act cannot well be conceived. It ignores the United States authorities, and is, in fact, an attempt to establish State sovereignty in the management of the medical department of the United States Army. This and all similar measures should be discountenanced by the medical profession of the States. If State authorities desire to give especial aid to the soldiers of their respective States, let that assistance be made entirely subordinate to the direction of the Surgeon-General of the United States. In this way alone can such aid be effectively applied.

In the second place, we wish to call the attention of voluntary associations to the Sanitary Commission as the great medium through which their supplies should reach the army. This organization is so identified with the medical department of the army that it may be considered a co-ordinate branch. It has its agencies in every division of the army, its depots of supplies, and its special means of transportation, so that every article confided to its care reaches its destination with promptness and certainty. The Commission is not only willing but anxious to receive and distribute the charitable offerings of the people to the soldiers.

In conclusion, we commend to the attention of the profession the communication from the executive committee of the Sanitary Commission on another page, in which the whole subject of the present medical provision for the army is ably and satisfactorily considered.

THE WEEK.

The *American Medical Monthly* has been delayed in its issue to the present time. This number concludes the eighteenth volume; and we regret to notice that the work is to be suspended. This is owing to the long continued absence of the editor and proprietor, Dr. J. H. Douglass, who has been an active member of the Sanitary Commission nearly from its organization, first as an Inspector and more recently as an Associate Secretary. The *Monthly* was originally conducted by the Faculty of the New York Medical College, but since 1857 it has been under the able editorial management of Dr. Douglass. In the absence of Dr. D., Dr. Elsberg at first conducted it, but subsequently Dr. Benjamin Lee became its editor. During the nine years of its publication the *Monthly* has maintained a high position among the medical journals of this country. Its pages were always enriched by scientific articles, and the character of its reviews and editorials was such as to elevate the tone of medical journalism. We trust that its publication will soon be resumed.

We are glad to learn that the materials for the *Medical and Surgical History of the Rebellion*, now being collected by Drs. Woodward and Brinton, under the supervision of the Surgeon-General, are very abundant and valuable. The illustrations of the work, some of which are already completed as colored lithographs, are in the highest style of American art. The preparation of these volumes will involve a vast amount of labor; but in no way can labor be more usefully expended. We cannot overestimate the value of this great enterprise to military, medical, and surgical science.

It is to be regretted that we do not have more medical prizes for meritorious Essays. Many of the best monographs have been prepared under the stimulus of prizes, especially among the French. In this country few prizes are offered. The Boylston and Fisk Fund prizes have produced more valuable Essays than all others together. The prizes of the American Medical Association have stimulated essayists. But still there is need of more medical prizes, and we welcome every effort of this kind. The prize offered by the New York State Medical Society, growing out of the bequest of the late Dr. Merit H. Cash, is a step in the right direction. The subject selected by the committee is very important, and will doubtless call out several writers.

Correspondence.

Medical Society of the State of New York.
Albany, N. Y., March 11, 1863.

MERIT H. CASH PRIZE ESSAY.

[To the Editor of the American Medical Times.]

Sir—Those who attended the recent annual meeting of the Medical Society of the State of New York, will recollect the announcement of a legacy of five thousand dollars to the Society by the late Dr. Merit H. Cash, of Orange county. A committee was appointed, which reported in favor of devoting the interest of this money to a prize essay fund. It was the design of the committee to secure an equal amount from the treasury of the Society, thus making the amount offered for the prize essay about *seventy dollars.* This failed only through inadvertence on the part of the committee to present a resolution appropriating the money. It is safe to intimate that this will receive the early attention at the next meeting, when the successful essay will be decided upon.

The subject proposed for the essay is, "*How complete is the protection of vaccination, and what are the dangers of communicating other diseases with the vaccinia?*"

The competition will be confined to physicians residents of the State of New York. The essays may be sent in the usual way, with the name of the author in a sealed envelope, to Dr. Thomas W. Blatchford, of Troy, Dr. Edward H. Parker, Poughkeepsie, or Dr. John Ordronaux, 823 Broadway, New York, on or before the fifteenth of December, 1863. The decision of the committee will be announced at the meeting of the Society in February, 1864; and the successful essay will be published in the Society's transactions. The prize will be awarded in money, or in such a form as may be more acceptable to the successful author.

The questions proposed are exceedingly fair, and give no advantage to any who devote themselves to specialities in the profession. It is to be hoped that there will be a commendable competition for this prize. It was a happy thought of Dr. Cash thus to build for himself a monument that should have for its object a stimulus to the advancement of medical science, while it at the same time perpetuates his name, his memory, and his devotion to his profession. It seems a timely suggestion to the members of the profession whose locks are whitening with years, that such an example is worthy of imitation, and we earnestly commend it for their consideration.

Yours etc.,
S. D. Willard, M.D., *Secretary.*

STATISTICS IN PRIVATE PRACTICE.

[To the Editor of the American Medical Times.]

Sir:—Being fully convinced of the great importance of correct statistics to the real progress of medical and surgical science, I have been induced to submit to your notice the following 794 cases of labor occurring in my own practice, of which I have kept careful observations. Sex:—430 males; 364 females. Six cases of puerperal convulsions—all primiparæ—death of one patient soon after delivery. Two cases of placenta prævia, both did well, version in one case, the other terminated by ergot. One child lost in the case of turning, doubtless from the excessive hæmorrhage. I was called to the aid of the midwife in the last extremity. Three cases of arm presentation, version in all cases, the children lost, women saved, but one died the day after from vomiting and exhaustion brought on by the use of chloroform. One case of side presenting, then the arm coming down, delivered by turning. Seven cases of twins, four of breech presentation, one child lost. Three of face, two in the same patient, with malformation of the pelvis and lame, at separate labors, all the children lived. Four of the funis, one child saved, the cord being protected by placing it in the angle formed by the junction of the sacrum and ilium. Two of the feet. Three of the head and hand, no particular difficulty with the placenta, except in one instance, in which the cord was discolored and easily broken. After introducing the hand found hour-glass retention of the placenta, but with care and patience removed it entire. One case of hydrocephalus, dead some time, head enormously distended with fluid, and the cranial bones floating in it, the labor lasted about twenty-four hours. One case of embryotomy, the patient died the day after delivery. Nearly all the patients made a good recovery, and the satisfactory results were due to the use of common sense and patience, with conscientiously avoiding all unnecessary interference. The following were the only remarkable deviations from the usual convalescence. One case of pelvic cellulitis—following an easy labor—brought on by careless exposure, final recovery. One case of subinvolution, getting about too soon. One case of puerperal fever, recovered after a long illness. One case of phlegmasia dolens, and one of incontinence of urine, entirely disappearing after a few weeks. These labors have embraced all classes, from the poorest to the wealthy, and all nationalities, from the age of fourteen years to forty-eight. The most difficult cases have been amongst the Europeans, and the easiest amongst Americans, but the former have commonly rallied the quickest, and borne their labors the best. The forceps have been used but four times, but might have been twice as often advantageously, had not the great distance from my home prevented my procuring them in time. In conclusion I cannot speak too highly of the use of chloroform in obstetrical operations, and in the treatment of puerperal convulsions.

Yours respectfully,
J. W. Pooley, Sen., M.D.

Dobbs Ferry, Feb. 28, 1863.

BROMINE AS A PROPHYLACTIC

IN ERYSIPELAS, DIPHTHERITIC AFFECTIONS, ETC.

Medical Director's Office.
Louisville, Ky., March 1, 1863.

[To the Editor of the American Medical Times.]

Sir:—I desire to draw the attention of your readers to the use of bromine in the prophylaxis and treatment of erysipelas, diphtheritic affections, and in hospital gangrene. This agent has been used in the various hospitals in this district with very important results, in the following particulars:—

1st. As a prophylactic in wards where cases of erysipelas have broken out.

2d. In the treatment of erysipelas and diphtheria by the inhalation of the vapor and by topical applications of both the vapor and fluid.

3d. In hospital gangrene and in all sloughing sores by the topical application of the solution of bromine in the bromide of potassium.

I subjoin the directions for the use of the bromine for the purposes above indicated. These directions are prepared at the request of Surgeon Perin, Medical Director of the Army of the Cumberland, who in conjunction with Medical Inspector Lyman, Surgeon U.S.V., is now introducing the use of the bromine into the General Hospitals at Nashville and Murfreesboro, Tenn.

Yours etc.,
M. Goldsmith, Surgeon U.S.V.,
Superintendent of Hospitals at Louisville, Ky.

The Compound Solution of Bromine is prepared thus: Take of bromine, one Troy ounce; bromide of potassium, one hundred and sixty grains; distilled water, enough to make four fluid ounces of the entire mixture.

DIRECTIONS FOR USE.

1. *For Fumigation.*—Place vessels, containing *one ounce* of the solution, at different points of the ward, and in number sufficient to secure in the latter the constant presence of the odor of bromine.

It should be borne in mind that, if the vapor of bromine comes in contact with the vapor of water, hydro-bromic acid is formed; therefore, when there is much of the vapor of water disengaged in the apartment, the quantity of the vapor of bromine must be correspondingly increased.

2. *Topical Application of the Vapor.*—A piece of *dry* lint is to be placed over the diseased part; over this is to be placed another piece of lint, *moistened with the solution of bromine;* over this, a *third* piece *spread with simple cerate;* the whole to be covered with oiled silk and bandage, so arranged as to retain the vapor in contact with the diseased surface as long as possible. The solution is to be removed as often as it becomes exhausted by evaporation.

3. *The Solution, in Substance, as a direct Application, in Hospital Gangrene, Diphtheria, Gangrene of the Tongue,* and other diseases of this nature:—The parts are first to be dried by the application of charpie; then the sloughs, if thick, should be trimmed out with forceps and scissors as much as possible, for the thinner the slough the more effective is the remedy. The parts having again been dried, the solution is applied by means of a mop, or a pointed stick of wood, in quantity sufficient to saturate the sloughs. If the sloughs undermine the skin, or dip down into intermuscular spaces, the solution must be made to follow, with the pointed stick, or by means of a glass syringe.

If the application has been effectual, all odor from the diseased surface ceases, and the sloughs become somewhat hardened. The remedy should be re-applied every second hour, as long as any odor of putrefaction is present, or as long as the sloughs appear to be diffluent. It is not always necessary, especially when the sloughs are diffluent and thin, to use the solution in its full strength; it may be weakened by the addition of water, as the disease subsides.

The points to be especially attended to, in the use of the solution of bromine, are two: 1. The solution should be applied in strength and frequency sufficient for the impregnation of *the whole of the sloughs;* 2. To secure this end, the application *should be made by the Surgeon himself,* and never be trusted to a nurse. If the sloughs are thick and cannot well be trimmed, the bromine may be introduced into the thickness of the slough by means of a hypodermic syringe.

After the topical application of the solution, the parts, when so situated as to render it practicable, should be subjected to the influence of the vapor. (See par. 1.)

Surgeons will do well to bear in mind that bromine is a new remedy for the purposes indicated above. The directions for its use, given here, are those followed in the military hospitals of this city; it may be found advisable to modify them as experience with the remedy accumulates. It is, therefore, earnestly recommended that the subject be studied diligently, that the effects of the remedy be carefully watched, and that the application be varied as new facts are developed in its use.

A Tax on Burials.—In Boston the city clerk has to give a permit before a body can be buried in a graveyard. The question has arisen whether the permit has to bear a stamp, and Commissioner Boutwell has decided that it must. So that a man cannot be buried in Boston unless his friends pay a ten cent tax.

A Case of Criminal Negligence.—A young merchant, in one of the larger towns of Ohio, came to an untimely end a few weeks ago, by the administration of aconite, which had been sold to him by a drug clerk instead of boneset. He died within three hours after taking the first dose of the infusion.—*Druggists' Circular.*

Army Medical Intelligence.

STATE AID FOR THE WOUNDED.

The following Act has been introduced into the Senate of the State of New York, entitled:

An Act to provide additional means of relief for the Sick and Wounded Soldiers of the State of New York, in the United States service.

I. The People of the State of New York, represented in the Senate and Assembly, do enact as follows:

II. The Governor of the State is hereby authorized to appoint not to exceed two suitable persons as agents of the State, whose duty it shall be to provide additional means of relief for the sick and wounded soldiers of this State engaged in the United States service while being transported to their homes; to ascertain the names and condition of all patients belonging to this State in the United States Hospitals within such limits as the Governor may designate; to keep a register of the same, and to furnish information to all who make enquiry concerning them; to facilitate the removal of dead bodies of deceased soldiers to the friends of such deceased when such action is desired, and to act in conjunction with the medical agents hereinafter mentioned in all such cases as they may require, and to perform such other duties for the relief of the sick and wounded soldiers of this State as the Governor may designate and require; to make reports to the Governor of his or their transactions and expenditures with vouchers; the compensation of the said agents to be fixed by the Governor at a sum not exceeding that of a surgeon in the regular army service.

III. The Governor shall appoint not less than two medical agents, on the recommendation of the committee appointed by the Medical Society of the State of New York, consisting of Drs. John Swinburne and S. D. Willard, whose duty it shall be to consult with the Surgeon-General of the State in relation to the medical agents to be recommended to the Governor, and the duties of the said medical agents shall be, when not otherwise engaged, to visit the various United States Hospitals within such limits as the Governor may designate; to ascertain the necessities of the sick and wounded soldiers belonging to this State so far as may be consistent with the general regulations of such hospitals; to follow the army as the Governor may require; to take with them such hospital tents, stretchers, hospital nourishment and appliances as they may deem necessary for the care, comfort, and removal of the sick and wounded soldiers immediately after battle; to employ as they shall deem necessary a corps of nurses to act under their directions for the purpose of conveying the wounded from the battle-field and to aid in their removal to general hospitals, and the said medical agents shall so far as is practicable obtain permission from the Secretary of War, and if necessary from the medical directors of the army, to designate such cases of wounded soldiers belonging to this State as require their own special attention, and to retain the same under their own charge and direction until the condition of such wounded soldiers allows them to be removed to such general hospitals as the said medical agents may direct; to make requisition upon the Governor for such surgeons of the auxiliary corps of volunteer surgeons of the State of New York as they may designate to render assistance at such times as any impending battle may require, and to act at all times conjointly with the medical directors of the several divisions and corps of the army; to make full duplicate reports of their proceedings monthly, one to the Surgeon-General of the State and one to the Surgeon-General of the United States; the compensation of said nurses not to exceed the sum of one dollar per day, and the compensation of the said medical agent or agents shall not exceed the compensation of a surgeon in the regular army service, and the surgeons of the auxiliary corps to be allowed the necessary incidental expenses of travel and board while on duty.

IV. The sum of Fifty Thousand Dollars is hereby appropriated for the purpose of carrying this act into effect, and the same shall be paid out of any funds in the Treasury not otherwise appropriated, and the said sum or such portions thereof as may be necessary in the opinion of the Governor to be paid to him, and to be expended under his direction for the purposes aforesaid; the Governor to account to the Comptroller for the moneys that shall be expended in pursuance of this Act

V. This act shall take effect immediately.

LETTER FROM THE SANITARY COMMISSION

ON STATE AND VOLUNTARY AID FOR THE SOLDIERS.

U. S. Sanitary Commission.
New York Agency, 823 Broadway.
New York, March 11, 1863.

To Dr. J. V. P. Quackenbush,
Surgeon-General of the State of New York:

Sir—The attention of the United States Sanitary Commission has just been called to a bill soon to be brought forward in the State Legislature, entitled "An Act to provide additional means of relief for the sick and wounded soldiers of the State of New York in the United States service."

Such a bill appeals so forcibly to the natural sympathies of our people, and to any, except the judgment of experts, presents such an aspect of humane interposition, to which no possible objections could occur, that we very much fear it may be hurried through the Legislature without due consideration. Persuaded that you, sir, must, from the nature of your office, already feel the objections to any such bill, we have thought it our duty to ask you to oppose it, and would endeavor to strengthen your hands by stating briefly why it does not recommend itself to those who, like ourselves, have had a long and large experience of the wants and solaces of sick and wounded soldiers.

1. The National Government is the national soldier's *best friend*, doing for him, at all times and under all circumstances, a hundred times over all that any State Government, or any benevolent association of any kind or description can do. This is due to the fact, that the United States Government has a great Medical Department, supported this year at an expense (including salaries) of at least fifteen millions of dollars, which is co-extensive with the army, omnipresent, acting without reference to State troops, and therefore impartially, and in harmonious and co-efficient relations with all the other army departments. To maintain the National Medical Department in the highest state of efficiency; to honor its rules and regulations; to strengthen its discipline, and the public respect and confidence for it; to look to it for the care of all our sick and wounded men while under the control of the federal authorities—this, long experience has taught us, is the only thorough, humane, and unexceptionable method of ministering to the health and restoration of our suffering troops.

No movements or schemes to succor our sick and wounded men, which are not National, which do not apply reform to the central source of relief, by improving the Medical Department of the United States Army itself—can be otherwise than illusive and superficial. Whatever has hitherto been effectually done to benefit the cause of the sick and wounded soldier, has been done, by increasing the force, improving the regulations, elevating the rank, or selecting more efficient presiding officers of the United States Medical Department. The vigilance of States should be directed almost exclusively to improving the general legislation of Congress in medical matters through their senators and representatives;—for as the New York soldier is, or may be everywhere—at New Orleans, Port Royal, Western Virginia, Vicksburg, as well as near Washington—there is no chance or opportunity of taking care of him, except on some universal system which pervades the whole country—that is, not as a New York soldier at all, but only as a National soldier. You must, then, invigorate the National Medical Department and act through this, to be able to reach effectively your New York soldier—who must commonly fall sick in places far beyond any State reach. If the State of New York wishes to have *all* New York soldiers who may fall sick, well taken care of, let her instruct her Senators to give their watchful and studious attention to whatever possible improvements the general medical service of the army admits of. Nothing can secure any certain protection or care to the scattered and untraceable soldiers of this or any other State, except a general system, which contemplates and provides for the wants and perils of each and all our national troops. The slightest improvement at the centre is more efficacious than the largest at any given point of the circumference. Any general legislation at Washington for the improvement of the Medical Department, is a thousand fold more effective than the most costly legislation respecting the comfort of their own troops in the national service, which individual States may devise or consummate.

2. But, more than this, State legislation is usually—not intentionally—either in opposition to or in rivalry with National legislation in regard to medical matters.

Already, the great, beneficent, general system of the Government in its Medical Department has been constantly embarrassed by the well-meant efforts of benevolent associations, either representing States or communities, who have insisted on pursuing their humane work in their own way—confusing the regular system; disparaging and discrediting the responsible surgeons and nurses; exciting general suspicion of, and discontent with, their labors, and leaving the deluded public to imagine that voluntary associations, the Sanitary Commission, State societies, or local committees were the main reliance of the sick and wounded soldier. This is grossly unjust and mischievous. Three-quarters of all our sick are always beyond the reach and care of any State protection; and those who are not so, owe, and from the nature of the case must always owe, to the National Government itself, to its 3,000 responsible surgeons, and 15,000 hired nurses, and the regular National supplies, ten times (we think a hundred times) more than to all external or extra-federal sources of benevolence whatsoever.

State legislation and State interposition for the benefit of its own soldiers, after they pass into Federal or National hands, is purely injurious. It may have a show of benevolence and humanity, but it cannot have the substance of it. Let the States look well to their troops before they pass into National control! You know too well, sir, as Surgeon-General of New York, how much might be done, and has been done, and remains to be done, in regard to the due selection of regimental surgeons, of inspection, of care of troops *in transitu*, and before being mustered in, to doubt where State care ought to be applied. And, after the New York soldier leaves the Federal wing, our State will have quite enough on her hands fitly to manifest her humane interest in his welfare. But any legislation which undertakes to look after him, as a New York soldier, while in the National army, is equally false in principle and ineffectual in practice. It emphasises a distinction which, on patriotic grounds, ought to be smothered; it holds out a hope which cannot be fulfilled; it confuses and embarrasses a national system which should be cleared and facilitated; it sets an example of interference which, generally followed by other States, would clog, obstruct, and shatter the great machinery of the National Medical Department, and disturb, to the universal loss and injury of all the sick and wounded, its beneficent and ever improving workings.

We do not propose to examine the particular features of the Bill, now threatening the welfare of the New York National Soldier. It is against the principle of it, and all similar Bills, that we protest. We do not see, however, that there is a single provision of the Bill which is not an attempt to do by State agents, what the National Government is either doing or is bound to do, and should and must be made to do by its own agents. The National Government is making provision at this very moment, to do for the New York Soldier, and every other Soldier, precisely what this Bill proposes—but could not do it if it were possed. It is arranging, and has already extensively arranged for the transportation, at Government rates, of Soldiers to the points nearest to their homes, which it is possible to reach in public conveyances. It is preparing special *through* cars—the first arrived yesterday in Jersey City, with forty-two sick—for the easy and safe carriage of the sick and wounded between Washington and New York—an advantage certain to accrue in a more than even proportion to the New York troops. Registers of all the sick and wounded already exist in the offices of the Medical Directors, or the U. S. Sanitary Commission. Special Inspection of all Hospitals is already systematically carried on by the Department itself, and by the U.S. Sanitary Commission—such as State agents could not properly be allowed to pursue, for with agents from each State ransacking each and every Hospital at their will, only hopeless confusion and injury to the soldier could ensue.

The Medical Department of the U.S.A., at the outset of the war, asked for and received the aid of a Commission, appointed by Government, to organize and represent the voluntary benevolence and supervisory care of the homes and hearts of the whole country; to act with the Medical Department as a supplementary body, adopting its rules and regulations, sustaining its discipline, eking out its inevitable defects, and pouring through its normal channels and machinery such extra supplies as the anxious affection and good will of the public insisted upon contributing, as an expression of sympathy and love for the sick soldier. Thus originated the U.S. Sanitary Commission. The peculiarity of it is, that it is just as national as the Medical Department itself; as universal and impartial; that it proceeds by the same rules and principles; is a helper and friend, not a critic and rival. Its aim has been, and is thoroughly known and acknowledged by the Medical Bureau to be, purely supplementary, and in a spirit of entire subordination. Thus, it upholds its military discipline, supports all its rules and usages, sympathizes with and encourages the responsible authorities, aids the Medical Department in obtaining new facilities from Government, and in effecting beneficent universal reforms in its own general system. Thus sustained, the Medical Department has made prodigious strides in efficiency; it is now as well administered as any department of the army; it is steadily improving; it has the confidence of the civil medical profession; it is presided over by a man of consummate science, administrative ability, and high personal integrity—a humane and progressive man—Gen. Hammond, Surgeon-General of the U.S.A. This semi-official Board, the U. S. Sanitary Commission, is the sole channel through which any extra-government aid can be given to the sick and wounded soldier, without violating the order, the discipline, the efficiency of the Medical Department itself. It has already earned such a confidence from the Government, the Surgeons, and the Generals in the field, that, next to the Medical Department, it is their main reliance; and it is not too much to say, that it has twenty times the opportunities, facilities, and means of all other outside organizations combined, to aid the National soldier, whether in New Orleans, Murfreesboro, Newbern, or near Washington. Its medical Inspectors, select and educated experts, accompany every column of the army; its supplementary supplies go with every expedition; its relief agents are wherever the sick soldier falls or lies—on the battle-field, in the hospital, with the transport; its homes and lodges, under the charge of the auxiliaries, are at Cincinnati, Louisville, Cairo, Nashville, Washington, and elsewhere. Thousands of soldiers sick, wounded, convalescent, discharged, weekly receive its shelter and its food, its safe-conduct, its transportation facilities, its aid in securing their pay and pensions. Its special Hospital Inspection Corps, in which nearly a hundred of the most distinguished medical men in the country, from Wisconsin to Alabama, are enrolled, are on ceaseless rounds of rigid inspection of all hospitals, reporting to their chief, Dr. Clarke, at Washington, who reports directly to the Surgeon-General himself, all existing defects, whether in the *personnel*, or the general condition of hospitals, east and west. It has a great consolidated registration system, by means of which, on inquiry made, the whereabouts and condition of any sick or wounded soldier known to any department of the government itself, can be discovered by his anxious kindred and friends. It collects money on the largest scale ever known to volunteer benevolence, and gathers supplies on an equal scale of vastness—solely owing to the self-recommending nature of its methods and principles. Seven hundred thousand dollars have flowed into its treasury—not including the money in the treasuries of its auxiliaries—and supplies (including those received by its auxiliaries) to the value of three or four millions must have passed through its hands. Every dollar and every article is pledged to the watch, and care, and relief of the national soldier, and is impartially utilized for his benefit. Now, what State-plan, what local effort, can compete with so vast a National method and instrument as this? Why should State pride and local feeling be permitted to diminish its usefulness, by diverting any portion of the public sympathy or confidence from it; by encouraging other and obviously imperfect, partial, and competitive plans—not analogous with the government system, or the Medical Department, and not acceptable to them? Is there not danger of impairing the usefulness of this tried system—of weakening the public confidence in it, and thus seriously injuring the National soldier in his sick-bed, or on his bloody battle-field? Nothing but a profound practical conviction, derived from thorough acquaintance with the subject, after two years' intense devotion to it—that every State movement, whether legislative or through popular organizations, which strives to discriminate among and separate out for special aid and attention, the soldiers of individual States, is a serious blow at the Government, the National Cause, the Medical Department, the responsible surgeons and nurses charged with the care of the sick, the National soldier himself, and finally, the very soldiers of the very State it is designed to bless—nothing but this solemn and well considered conviction, could embolden us to say so confidently and plainly what we have said in this letter, and what we earnestly commend to your intelligent and grave reflections, and through you to our State legislators. If it be suggested that we are speaking in the interest of the U. S. Sanitary Commission, let there be no doubt upon that point. We are so. But that Commission has no interest, except that of the Government, the Cause, and the National soldier—each and every one. It knows that whatever weakens its hands, weakens the Medical Department, the Government and the Cause, and injures the National soldier, whether sick or well. It claims the right to assert its disinterestedness in these statements, and flings itself boldly upon the character of its conductors, its allies, friends and supporters, for whatever weight these arguments may want beyond their own self-evident truth.

Very respectfully yours,

Henry W. Bellows, Chairman, W. H. Van Buren, M.D., Wolcott Gibbs, M.D., C. R. Agnew, M.D., George T. Strong, F. L. Olmsted,

Executive Committee U. S. Sanitary Commission.

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The Canada *Lancet* is the title of a medical journal just issued at Montreal, edited by William Edwarn Bowman, M.D. It is to be published monthly, eight pages, double column, at one dollar.

It is stated that Prof. Bowling is delivering lectures to a medical class at the University of Nashville.

Original Lectures.

LECTURES ON DISEASES OF THE EYE.

By HENRY D. NOYES, M.D.,

ASSISTANT SURGEON N. Y. EYE INFIRMARY.

The order I shall pursue in these lectures is to begin with the external tissues, and go on successively to the deeper parts. I shall preface the pathology of each structure by a resumé of its anatomy and physiology. I do this for the sake of clearness. That which first presents itself, then, is the eyelids.

THE EYELIDS.—PALPEBRÆ.

Anatomy.—The curtains which cover the eyeballs are composed of several layers of tissue, viz. skin, muscular fibre, fibro-cartilage, and mucous membrane. The skin is thin, supple, destitute of fat, and has a few fine hairs. It is connected to the subjacent layer of muscular fibres by delicate areolar tissue. The muscular fibres belong to the orbicularis palpebrarum. They are pale, and run in a curvilinear course like a sphincter muscle. They cover not only the eyelids, but reach to the brow above and to the cheek below, and out towards the temple. They form a layer, which is thinner at the palpebral portion than at the circumference of the muscle. The orbicularis is inserted into the vertical ridge of the lachrymal bone by a round tendon, the internal palpebral ligament, or tendo oculi, and also by direct attachment of its fibres to the ascending process of the sub-maxilla and to the lachrymal bone. The tendon is about a quarter of an inch long, and crosses in front of the lachrymal sac horizontally. Beneath the muscle is the tarsal cartilage, which forms the skeleton of the eyelid. In the upper lid it is wider than in the lower lid. At its free margin it is thick, and gradually becomes thin to its other border. The external surface is convex, the internal concave. The levator palpebræ superioris is inserted into the upper edge of the tarsal cartilage of the upper lid by a broad and thin tendon. Two kinds of glands are found in the tarsal cartilages, viz. the hair follicles and the Meibomian follicles. The hair follicles giving origin to the ciliæ form the most external or superficial rank, and are more numerous in the upper than in the lower tarsus. The ciliæ fringe the borders of the lids, guarding against the entrance of dust, and modifying the amount of light. They naturally point away from the globe, and are continually falling out and being renewed. Behind these simple follicles is found a single row of sebaceous follicles of a more complicated arrangement. They are racemose, each consisting of a central stem or tube, into which open clusters of globular follicles. The length of the Meibomian glands is nearly equal to the width of the tarsal cartilages. They may be traced upon the under surface of the erected lids as white lines shining through the transparent mucous membrane. They open upon the bevelled free border of the lids by minute apertures, which emit their unctuous secretion. This oily matter prevents the adhesion of the lids to each other, and tends to restrain the tears from overflowing. Lastly, the internal surface of the lids is clothed with mucous membrane, the palpebral conjunctiva, which adheres intimately to the fibro-cartilage. Its anatomy will be described when speaking of the conjunctiva.

The opening between the eyelids is called the palpebral fissure—their junctions are known as commissures, or angles, external and internal. The external angle is sharp, and marked by a few wrinkles of the skin; the tarsal cartilages are here connected at their extremities to the edge of the orbit by a few fibres of fibrous tissue sometimes called the external tarsal ligament. The internal angle, canthus (wheel), is shaped like a horse-shoe. The borders of the lids are here more rounded, and at the distance of about a quarter of an inch from the internal angle is a papilla, on whose summit is a small opening, the punctum lachrymale. The opening is directed against the surface of the eye. The ciliæ and Meibomian follicles do not extend beyond the puncta. A fine probe will enter the punctum by being pushed vertically, and its course will there be arrested unless turned in a horizontal direction, where it passes for a quarter of an inch along the canaliculus, into the lachrymal sac. The canaliculi lie near to the free border of the lids. Their calibre is small, and their internal surface is lined by mucous membrane. They open usually by a common orifice into the lachrymal sac. If the eyelids be dissected from behind, or if they be divided from the adjacent parts upon three sides and turned upon the nose—at the internal canthus, muscular fibres may be found starting from the border of the lids near the puncta and going behind the lachrymal sac to be attached to the lachrymal bone. They are generally few and pale. I have, however, seen them florid, and easily recognised. They compose the tensor tarsi or muscle of Horner.

The blood-vessels of the eyelids come from the temporal arteries, the arteria angularis nasi, the supra-orbital, the infra-orbital, and other twigs from the orbit. By the angular and the supra-orbital arteries a very important anastomosis is effected between the face and the cavity of the cranium—between the external and the internal carotids. The veins correspond to the arteries. The nerves of the skin are branches of the fifth pair—the motor nerve of the orbicularis is the facial or seventh nerve—the motor nerve of the levator palpebræ superioris is the motor communis oculi or third nerve.

Physiology.—The eyelids protect the eye against foreign particles, against excessive light, and diffuse the lachrymal secretion over the surface. Fishes need no apparatus for moistening the eyes, nor are they exposed to great intensity of light—they have neither lachrymal apparatus nor eyelids. Birds, on the contrary, have three eyelids—the third, or membrana nictitans, is drawn over the cornea when the light is disagreeably intense. Winking is a momentary relaxation of the levator palpebræ and simultaneous contraction of the orbicularis, giving the levator rest, and spreading the conjunctival secretion over the cornea. The action of the orbicularis is precisely like that of a sphincter, and it would throw the lids into wrinkles, but that they are kept smooth by the resistance of the fibro-cartilages. By the contraction of the orbicular the upper lid is depressed, and the lower raised, until their edges meet. When it relaxes the lower lid falls, and the upper lid may be raised by the levator. The levator tends to pull the upper lid back into the orbit, causing the surface of the lid to hug and sweep over the globe. If the levator be paralysed the occipito-frontalis can by strong effort open the palpebral fissure imperfectly, but the mode of action is very different from that of the levator. The eyelids are constantly in close apposition to the globe. The fluid interposed renders their movement easy, and at the same time serves to maintain their contact. More will be said of the action of the tensor tarsi and orbicularis in speaking of the lachrymal apparatus.

Diseases of the Eyelids.—The skin is subject to the same eruptions as are other parts of the tegumentary surface, viz. eczema, herpes, syphilitic eruptions, etc., and it also becomes the seat of warts, cancroid, of lupus, etc. These diseases do not require any special treatment on account of their palpebral location.

Œdema sometimes occurs suddenly in the eyelid, without other disease. The affection is painless, the lids swollen, closed, the skin shining, of natural color. The only treatment needful is the application of cold water, and the swelling subsides in a few days.

Abscess may form in the lids. They will be swollen and closed, the skin of a livid red, the cuticle inclined to desquamate; there will be heat or pain in the part. There will be some secretion from the conjunctiva gluing the ciliæ together. Suppuration occurs rapidly in the loose areolar tissue of the lids, and it is important to make an early incision into the abscess. If allowed to open of itself the lid will be very liable to deformity in the healing, because of the great destruction of tissue.

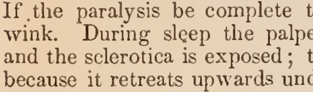
This caution is to be especially observed in phlegmonous erysipelas of the face, where abscess is apt to occur in the lids very early, and remain undiscovered on account of the general swelling. The incision should be made parallel to the tarsus, and be long enough to lay open the abscess freely.

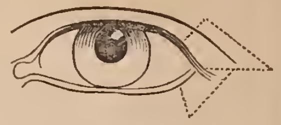
Ecchymosis, the result of blows, operations, wounds, takes from one to six weeks for absorption. The process may perhaps be hastened by stimulating lotions, as alcohol and water, or tincture of arnica—a favorite application of prizefighters is a piece of raw beef.

Spasm of the Orbicularis — Blepharo-spasm, occurs under various circumstances. 1st, as a symptom of inflammation of several textures of the eye; 2d, from the lodgment of a foreign particle under the lid; 3d, as part of the muscular disturbance in chorea; 4th, as a kind of habit. In the first three cases it is only a symptom whose removal will follow the subsidence of the primary disease. In the last case, if the habit of twitching the lids have been long established, it cannot usually be broken up. Persons are sometimes worried by the spasmodic twitching of a few fibres of the orbicularis without closure of the lids. Simple rubbing will often stop it. They will generally be satisfied if only assured that the affliction is harmless.

Paralysis of the Orbicularis—Lagophthalmos—Is one of the effects of paralysis of the seventh or facial nerve, the old "portio dura." The symptoms on the part of the eyelids consist in the inability to shut them, and in a habitual stare that makes this eye appear to be larger than its fellow. This is the effect of the drooping of the lower lid and the lifting of the upper lid by the unopposed levator. If the paralysis be complete there will be no attempt to wink. During sleep the palpebral fissure remains open, and the sclerotica is exposed; the cornea cannot be seen, because it retreats upwards under the upper lid. Another effect of the paralysis, whether complete or partial, is epiphora. The lachrymal puncta are not held against the globe, and the propelling power for the expulsion of tears being wanting, they stand in the conjunctiva, and occasionally overflow the cheek.

The diagnosis is easy, by noticing the relaxed and expressionless character of that side of the face, and by the inability of the patient to shut the eyelids. Treatment will vary according to the cause and the duration of the paralysis. Facial paralysis sometimes occurs in young children, and is afterwards recovered from. In the early period of the disease, blisters, stimulating liniments, iodide of potassium, and electricity should be employed. If it happens from injury of the head, intra-cranial tumor, or exudation, or other incurable disease, and have existed a long time, nothing remains but a surgical operation to relieve the lagophthalmus. This operation consists in shortening the palpebral fissure, by making the upper and lower lids adhere to each other for a certain distance from the external commissure. The mode of doing this will be seen by the diagram. Two incisions are made through the skin, as indicated in the figure; the flap of skin dissected from the muscle and the borders of the lids made raw, to an extent needed by the case. The edges of the wound are then brought together by sutures.. It will be more secure to put a hare-lip suture at the angle where the lids are joined, for there is a strong tendency to separation. The eyelids should be held together by strips of isinglass plaster. Another mode of operating may be adopted where the eyelids are very loose, and a greater effect is desired. I employed it in a young mulatto girl, æt. 11, in whom facial palsy had occurred in infancy, and from which she had nearly recovered. It may be thus represented: Triangular flaps were taken from the skin of the upper and lower lids, at the outer angle, the flap from the upper lid being the larger, and including in its base a longer extent of the tarsal edge. The wounds were united in a vertical line. Union took place by second intention, and some wrinkles remained in the skin, but the palpebral fissure was shortened; the eyelids could be quite shut, and epiphora ceased.





Paralysis of the levator palpebræ superioris produces the opposite condition of Ptosis.—The upper lid falls down. Its edge may descend below the pupil, and completely shut out the light. The levator may be the only one of the muscles supplied by the third nerve to suffer injury, or the remaining muscles may be implicated. In the latter case there will be divergent squint and double vision. This being so, the patients usually make no effort to see with this eye. But if only the levator be affected, they attempt to uncover the pupil by bending the head backwards, and strongly contracting the occipito-frontalis muscle, which, wrinkling the forehead, and arching the eyebrow, imperfectly lifts up the lid. During this effort the skin of the lid remains perfectly smooth.

If medical treatment by stimulating liniments, by blisters, cupping, the administration of iodide of potassium, and by electricity, have been exhausted, and time enough have elapsed to give the efforts of nature and medicine a fair trial, a measure of relief can be afforded by surgery. An oval piece may be taken from the skin of the lid, whose length shall be nearly that of the tarsus, and breadth determined by the laxity of the skin. A transverse fold may be pinched up in the fingers, or by a forceps devised for this purpose, cut off with scissors; the edges of the wound united by interrupted sutures. The nicety of the operation consists in apportioning the exact amount of skin to be removed. Another operation has lately been performed by Graefe, to relieve ptosis: To seek for the tendon of the levator at its insertion with the fibro-cartilage, divide it across, cut off a section, and attach it again to its insertion by sutures. The operation has once, to my knowledge, been done in this city. The dissection was found to be extremely difficult and uncertain, and the result unsatisfactory. A wire spring clamp has also been devised, to pinch up a fold of skin, and thus avoid an operation, but I have never seen a patient willing to wear such an unornamental appendage. It has been proposed to pass sutures through a fold of skin, and tying them tightly, to cause a permanent wrinkle and shortening of the lid, without removing any skin. The process of healing is tedious and painful, and the cure apt to be imperfect, as the skin gradually stretches out.

Epicanthus.—This is a congenital peculiarity consisting of a fold of skin running in a crescentic form, from the inner end of the eyebrow down the side of the nose, upon the cheek. The fold overlaps the internal canthus, and when large, gives an unpleasant expression to the face. Slight degrees are not unfrequent, especially among children. In Sichel's plates is a picture of a striking instance of this deformity. As the person grows older the nose increases in height, and may quite obliterate the redundant folds. I have once been called on to relieve the deformity by operation. The patient was a girl, twelve years old, who possessed this unnatural feature in a marked degree. The operation consisted in pinching up the skin over the root of the nose, and between the eyebrows, which should stretch out the lateral folds, to cut this off, and unite the wound by sutures. In this case suppuration occurred, and union by second intention; but the object was attained, while the resulting scar was not conspicuous. Such cases are rare, as their relief is simple.

Original Communications.

THREE CASES OF STRANGULATED HERNIA,

IN WHICH THE OPERATION WAS PERFORMED WITHOUT OPENING THE SAC.

By HENRY B. SANDS, M.D.,

SURGEON TO ST. LUKE'S HOSPITAL.

Case I.—*Strangulated Femoral Hernia.—Operation without opening the Sac.—Recovery.*—On October 11th, 1862, I met Dr. S. S. Purple, in consultation, to see a lady, residing in this city, who had suffered with the usual symptoms of strangulated hernia for about thirty hours. The patient was 25 years of age, married, and in good general health. She noticed, a little more than two years ago, a small swelling in her right groin, concerning the origin of which she could give no explanation. At first occasioning no inconvenience it was soon observed that at times the swelling would suddenly enlarge, the increase in size being accompanied by pain and vomiting, and that after a longer or shorter interval the pain and vomiting would disappear—their disappearance being coincident with the subsidence of the tumor. She had sought surgical aid but once before, when Dr. Purple succeeded in returning the protrusion by the employment of the taxis. The present attack began on the day previous to my visit, shortly after the patient had risen from bed. Whilst dressing herself she was taken with pain, and soon became aware that the tumor had descended. At the same time, according to her statement, she had a tolerably free evacuation from the bowels. The pain then grew more severe, being most intense in the neighborhood of the umbilicus, and vomiting of a persistent character soon followed. These symptoms continued, without any amelioration, up to the time I first saw her. The attacks of vomiting were then taking place at intervals of from fifteen minutes to half an hour. The matters vomited were greenish and watery, but not stercoraceous. Pulse 90; skin warm and moist; countenance pale, and expressive of suffering. A tumor, about as large as a hen's egg, was situated in the right groin, immediately over Poupart's ligament. It was tense, elastic, resonant on percussion, and not very painful. It lay over the inner half of Poupart's ligament, was freely movable above and externally, but firmly fixed at the situation of the femoral ring. Dr. Purple had already made a careful and patient attempt at reduction, but without the use of an anæsthetic. It was now decided to render the patient insensible, and then to act as circumstances might require. Ether having been administered, the taxis was again employed, but without success, and I accordingly proceeded to relieve the stricture by means of the knife. I made a single, straight incision, about two inches long, on the inner side of the tumor, and soon arrived at the level of the sac, which was in good condition, and evidently without any sign of gangrene. Leaving the sac unopened, the forefinger of the left hand was passed with care up to the situation of the femoral ring, into which I introduced a hernia knife, and, directing the edge of the instrument, in the usual manner, upwards and inwards, made a limited division of tightly constricting tendinous fibres. An assistant having then elevated the patient's pelvis by raising the lower extremities (an expedient which, in my opinion, greatly facilitates the reduction of hernial tumors), I succeeded, by very slight manipulation, in pushing back a knuckle of protruded intestine, which returned to the abdominal cavity with a gurgling noise. The sac then felt as though it contained a small piece of omentum, adherent to its inner surface, but it was deemed best to leave this undisturbed, there being no reasonable doubt that all strangulation was removed. There was hardly any bleeding during the operation, which was done with comparative ease, and without any such disturbance of the tissues as usually happens in the ordinary procedure where the sac is laid open. The wound was closed with silver sutures, and dressed with adhesive straps, a compress of lint, and a spica bandage.

Oct. 14th.—Everything has gone on well since the operation. The vomiting and pain ceased almost immediately, and small doses of opium produced quiet refreshing sleep. Yesterday, Dr. Purple prescribed a tablespoonful of castor oil, which, in a few hours, caused a healthy-looking fæcal evacuation. Wound healing well.

Oct. 18.—Patient well. The wound has healed completely by adhesion, and the dressings have all been removed.

Case II.—*Strangulated Femoral Hernia.—Operation without opening the Sac.—Recovery, with Fæcal Fistula.*—On February 15th, 1863, I saw Mrs. J——, of this city, in consultation with Drs. Van Antwerp and Vosburgh. The patient was about 60 years of age, and had for many years been in feeble health. She stated that she had had a rupture in the left groin during the past nine years, which was probably caused by over work, and for which she had never worn a truss. It had at times given her a good deal of trouble, by the pain and vomiting which accompanied its descent; she was almost always able, however, to effect a reduction without assistance, although sometimes four or five hours would elapse before her efforts proved successful. Soon after getting out of bed on the 13th inst., she felt the tumor descend, and was seized with the desire to go to stool, where she had two evacuations from the bowels. Pain and vomiting then set in, and continued through the day, the whole of which she spent in forcible but fruitless attempts to replace the protruding organs. On the 14th the symptoms becoming more severe, she sent for her attending physician, Dr. Van Antwerp, who, with the help of Dr. Vosburgh, made several unsuccessful attempts at reduction. At the time of my visit, on the 15th inst., her condition was as follows:—Pulse 104, small and feeble; skin cool, and covered with moisture; abdomen somewhat tense, but not painful, except in the neighborhood of the tumor; matters vomited, thin and yellowish, but without stercoraceous odor. The hernia was situated over Poupart's ligament, covering its inner two-thirds; it was hemispherical in shape, and not distinctly defined, the skin and subcutaneous tissues being inflamed and œdematous. Pressure gave acute pain, but caused no change in its position, which was fixed and immovable. The patient having been put under the influence of ether, I made an incision, as in the former case, on the inner side of the tumor, and found the tissues between the integument and the sac considerably thickened, and matted together into a mass, in which the so-called "coverings" of the sac were not distinguishable. The parts were also unusually vascular, several vessels requiring the ligature before the sac was exposed. This having been accomplished, and the sac appearing to be healthy, I determined, if possible, to leave it intact, and to relieve the stricture by external division. I found the femoral ring tolerably tight, and divided Gimbernat's ligament with a hernia knife, after which I made an attempt at reduction, and failed. I then drew the sac downwards, so as to get a view of its neck, across which several short, glistening, fibrous bands could be seen running. These I cut through carefully, being cautious not to open the sac, and as soon as this had been done I was able to return the intestine, which slipped up with a gurgling noise. A small portion of omentum remained unreduced, and could be felt adherent to the sac; this was left without further interference, and the wound in the integument brought together with sutures and adhesive strap, over which were applied a compress and spica bandage. It is worthy of remark that, in cutting the stricture, the obturator artery, which had an abnormal origin, and ran over the neck of the sac, was accidentally divided by the hernia knife; it was easily secured by the ligature, however, after having drawn up the tendinous margin of the femoral ring, so as to expose the divided ends, both of which had to be tied, before the hæmorrhage was controlled. After the operation the patient rallied slowly, and during the first week, the progress of the case seemed favorable; there were no signs of peritonitis; the bowels moved on the sixth day, and the greater part of the wound healed by the first intention. On the ninth day, however, a small quantity of yellowish fluid made its appearance at the wound, having a fæcal odor, and on the following day this grew more abundant, its character being unmistakable. An attempt was made to limit the discharge by making firm pressure over the wound, but this was not well borne, and for some days a very considerable quantity of fæces passed out at the artificial opening. Meanwhile the bowels continued to act with almost natural regularity, and the patient's general condition, though uncomfortable, did not appear to be critical. The discharge began to diminish rapidly about three weeks after the operation, and is now so small as to be scarcely perceived, the opening having been reduced to a narrow fistulous track.

Case III.—*Strangulated Inguinal Hernia, complicated with an Undescended Testis.—Operation without opening the Sac.—Recovery.*—In the afternoon of Wednesday, Feb. 25, 1863, I visited Thomas ——, at Rahway, New Jersey, where I met Drs. Abernethy and Drake, of Rahway, and Mr. Marsh, the truss-maker, of New York. The patient was a slender, delicate looking lad, sixteen years of age. He had for several years been subject to a small hernia on the right side, which, however, had never given him any trouble, until the Sunday previous, when, after a fall, the swelling became suddenly larger, and did not disappear as usual. The ordinary symptoms, pain, vomiting, and constipation followed, and on Monday he was seen by his attending physician, Dr. Abernethy, who administered chloroform, and with the assistance of Mr. Marsh tried to reduce the tumor. Failing in this, and the symptoms not being very urgent, various external remedies were applied, and active interference delayed until Wednesday, when, signs of commencing peritonitis showing themselves in addition to the other symptoms, it was thought best to seek relief by surgical means. At the time of my visit, he had the usual aspect of a person suffering from strangulated hernia, but was in a tolerably good condition, and without any signs of prostration. The abdomen was somewhat tense and tympanitic, and there was pain, referred chiefly to the region of the umbilicus. The hernial swelling, situated on the right side, was about as large as a lemon, and evidently inguinal; it was quite tense, elastic, and resonant on percussion. On the same side it was noticed that the testicle had not descended into the scrotal cavity, and upon examining the hernial tumor, it was found that pressure on its posterior part caused the sickening pain peculiar to that organ, the outline of which, however, could neither be seen nor felt. Ether having been administered, I operated in the following manner:—A single straight incision was carried over the middle of the tumor, extending from just above its neck downwards for about three inches. Having, by careful dissection, exposed the tendon of the external oblique muscle, I cut through it so as to lay open the whole length of the inguinal canal, this step of the operation evidently affording great relief to the constriction. Failing to effect reduction by this means, however, I drew down the sac so as to expose its neck, when several circular fibrous bands came into view, consisting apparently of thickened sub-serous cellular tissue. The division of these with a scalpel gave complete relief to the strangulation, the gentlest manipulation sufficing to return the contents of the sac, behind which, as it lay loose and flabby in the wound, an oval body could be felt, evidently the undescended testis, which had been arrested in the inguinal canal. I left it where I found it, and closed the wound in the usual manner. I have not seen the patient since the operation, but have learned from his physician that it was entirely successful in relieving the symptoms, and that he recovered rapidly without any signs of peritonitis.

Remarks.—My object in detailing the above cases, is to bring before the notice of the profession an operation which, though well known in Europe, and almost exclusively practised by several English surgeons of eminence, has received little if any attention on the part of the profession in this country. So far as I have been able to inquire, our American periodicals do not contain a single recorded case in which this operation has been performed. The operation for the relief of strangulated hernia without opening the sac is of French origin, having been proposed by Petit in 1718. The proposal met with little favor, however, until 1833, when the procedure was revived by Aston Key, and subsequently advocated by Luke, Gay, Bryant, and several other English surgeons. The advantages claimed for the operation are, its simplicity, and comparative safety, the patient being spared the danger of peritonitis caused by the opening of the sac and the exposure of its contents. In regard to the first point, I am satisfied that it is much more simple than the ordinary operation, and that it involves much less disturbance of the tissues; it also appears to me to be exceedingly easy of execution, especially in cases of femoral hernia. As regards the comparative safety of the operation, this lies in the fact that the sac is left unopened. That the opening of the sac, together with the exposure and handling of its contents, is a circumstance which favors the occurrence of peritonitis, and which tends to increase the latter when already existing, will, I think, hardly be denied by those who have seen or treated many cases requiring operation. The most important statistics bearing on the comparative safety of the two methods are given by Mr. Luke, and the results presented are the more valuable, as all the cases occurred in Mr. Luke's own practice. Of 84 cases requiring an operation, the sac was opened in 25; in 59 it was left unopened. Of the former, in which the sac was opened, 8 died, or 32 per cent.; of the latter 7 died, hardly 12 per cent. The cases I have narrated are too few in number to warrant any general conclusions, yet I cannot help contrasting them with other cases where I operated by the usual method, and in which peritonitis of an alarming character almost immediately followed. There have been two principal objections urged against Petit's operation—1st, the danger of returning into the abdomen a portion of intestine strangulated by the contents of the sac; and, 2d, that of returning a band which is either gangrenous or ruptured. In regard to the first of these dangers, it may be remarked that the existence of internal strangulation is very rare, and that where it does exist there are usually adhesions between the sac and its contents, which compel the opening of the former in order to effect reduction. The same fact may be stated with reference to the danger of returning the intestine in a state of gangrene, this condition generally being preceded by such a degree of inflammatory action as is sufficient to produce an adhesion of the contents to the neck of the sac. Moreover, some opinion may be formed as to the existence or non-existence of mortification by attending to the general symptoms, and by noticing the length of time that has elapsed since the strangulation began; also, during the operation, the presence of gangrene is often announced by change in the appearance of the sac, even before this is laid open. But that the risk of returning a gangrenous intestine, or one doomed to gangrene, really does exist, is proved by the second case I have related; and yet the result of this case is especially interesting, as showing that such a procedure is not necessarily fatal, and that leaving the sac unopened does not prevent the establishment of an artificial anus. Some very instructive facts bearing on this question are given by Mr. Bryant, in Guy's Hospital Reports, 3d series, vol. 2, where an analysis is presented of 126 fatal cases of hernia. Mr. Bryant shows conclusively that the danger of fæcal extravasation, after the return of a mortified intestine into the abdominal cavity, has been very much exaggerated, this having occurred in one only out of six cases, and then at a remote period, after several weeks of favorable progress. In the same paper it is also shown that, where the intestine is gangrenous, a fatal result follows much earlier when it is left in the sac and laid open, than when it is returned to the sac's mouth, and the establishment of an artificial anus left to nature. The reason why fæcal extravasation does not more often occur is doubtless to be found in the fact that, peristaltic action being arrested in the mortified intestine, it remains stationary at the mouth of the sac, so that before it gives way the inflammatory plastic exudation has furnished a barrier, which defends the cavity of the peritoneum against the entrance of fæces. In conclusion, I may state that, in my opinion, there are few cases in which the operation without opening the sac should not be tried before resorting to the ordinary procedure; and that, if performed early, it is, as some author has already observed, little more than the employment of the taxis, with the addition of a superficial incision.

64 East 12th Street, N. Y., March 20, 1863.

AMPUTATIONS,

WHEN TO BE PERFORMED, AND WHEN NOT REQUIRED IN MILITARY SURGERY.

[Being a paper read before the N. Y. State Medical Society, at its last Meeting.]

By JOHN SWINBURNE, M.D.,

OF ALBANY, N.Y.

The following are the rules which I have adopted for amputation after careful study and experience; some of these rules I have adopted from the Sanitary Report on "Amputation:"—

1. "Cases where a limb is nearly or completely torn away, leaving a ragged stump."

2. "Cases in which the soft parts of a limb are extensively lacerated or contused, and the principal arterial and nervous trunks destroyed, and the bone denuded or fractured."

3. "Cases in which a similar condition (of the soft parts) exists without either fracture or denudation of bone."

4. Cases in which the artery or arteries are destroyed, so as to cut off circulation below the wound, and where gangrene would follow, Circulation ceasing, and the extremity becoming *cold*.

5. Compound and comminuted fracture of the knee-joint requires amputation, while the passage of small balls which do not shatter or open the joint too extensively, does not necessitate amputation.

6. Compound and comminuted gunshot injuries of the ankle-joint made by minié balls may require amputation, particularly where material injury is done to the arteries. Ordinary gunshot wounds of the same joint do not necessitate amputation.

7. Compound and comminuted gunshot injuries of the femur or tibia which extend into the knee-joint, may require amputation.

The foregoing rules are those which I consider applicable to amputation. I will now proceed to give such rules as seem to me most reasonable as governing excision; and shall assume that the main arteries are uninjured, and the parts beyond the wound possessed of full vitality:—

1. Excision should be confined to the upper extremities —the shoulder and elbow being the principal parts upon which that operation should be practised.

2. If the head of the humerus is shattered by a gunshot excision is the only remedy. If the comminution extends to the shaft, the loose portions only which are deprived of periosteum need be removed—the residue left to granulate. If the glenoid cavity is crushed it can be removed with a chain saw, or its injured portion gouged out.

3. If the elbow-joint is crushed or comminuted by a ball, excision is the only remedy. If the injury is confined to the articulating end of the humerus, remove it; but do not disturb the ends of the radius or ulna—on the contrary, if the injury be confined to the articulating ends of the radius, or radius and ulna, remove both; but not the humeral articulation.

If the articulating ends of the humerus, radius, and ulna are crushed, remove them all. What is meant in the books by partial excision, is the removal of a portion of the joint, such as part of the humeral articulation, or the articulating end of the radius or ulna only.

On the contrary, the removal of the entire half of the joint results in a new articulation, and not in anchylosis, as is often the case in partial excision. If the comminution extends to the shaft of the humerus, or radius and ulna, remove its loose spicula, and leave the rest to nature.

4. In comminuted compound fracture of the carpal end of the radius, or radius and ulna, excision of the articulating ends affords the most reasonable prospect of success. Leaving it to nature is far preferable to amputation, Never amputate for this injury.

5. Compound gunshot injuries of the carpus or *metacarpus* seldom if ever require either excision or amputation. Remove the loose bones, and treat as a simple wound.

6. In compound gunshot injuries of the phalanges excision can be practised only with varying success, owing to the size of the bullet and smallness of the member. The rule is to save as much as possible. Injuries to these parts inflicted by buck-shot or pistol balls do not, as a rule, require amputation. On the contrary, most of them can be saved.

7. In compound and comminuted injuries of the humeral shaft, excision or amputation should never be performed. The loose spicula should be removed, and the case treated as an ordinary compound fracture. If, however, the comminution extends to the articulation, it should be excised with the loose spicula, while the fragments of the shaft which still retain their periosteum should not be disturbed.

8. The same rule applies to the shaft of either or both bones of the forearm. In all cases avoid constriction by bandaging.

9. The treatment of compound and comminuted fractures of the thigh becomes a matter of serious consideration, since it involves many important points. Statistics from the Crimean War show that in amputation through the hip-joint all died. In the upper third 87.0. In the middle third 60.0 died. In the lower third 56.6 died; while the present war will, I think, demonstrate that even a greater proportion than this prove fatal.

Excision of the *shaft* is evidently out of the question, since all die after the operation. The question then arises, shall we amputate? Or, shall we treat such cases as ordinary compound fractures? I prefer the latter, and have from the first thought it the most reasonable treatment. The plan I propose is to place the patient on a bed or stretcher, extend the limb as near as possible to its normal length without giving too great pain. Retain it in that position by fastening the foot to the foot of the bed or stretcher by means of adhesive plaster as in ordinary compound fractures, as I have on other occasions illustrated.* Make the counter extension thereon by an inclined plane against which the body impinges by elevating the foot of the bed or stretcher—or the use of a perineal belt fastened to the head of the bed or stretcher. To obviate inversion or eversion of the foot, I place bags of sand on each side of the foot. There should be no bandaging of the leg or thigh. If collections of matter follow, free incisions may become necessary to relieve constrictions, and to facilitate the discharge of such matter and spicula of bone—irrigation or the application of cloth wet in cold or warm water must be continued to the limb until inflammation has passed off.

Under no circumstances must the patient be removed from the bed or stretcher, until the consolidation of the bone is considerable, when artificial support can be given, and the patient allowed to go about on crutches. In this way I contend that many more lives can be saved than by amputations, and of necessity with less mutilation. Hence, do not amputate for compound and comminuted fractures occurring in the shaft, neck, or head of the thigh-bone.*

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* See Transactions State Medical Society for 1861; also Medical Times and Medical and Surgical Reporter same year.

If the head of the femur is detached and the joint opened it may require removal. This, however, may be a point for future consideration.

10. Gunshot injuries of the cancellated structure of the bones which enter into the formation of the knee-joint do not necessitate amputation.

I have seen several instances in which the ball had passed through the head of the tibia without wounding the joint, and still the patients are recovering with good limbs. One case where the ball was found to have passed through the insertion of the *ligamentum patellæ*, and deep into the canelli, was removed by the trephine, and the patient did well. Another did well where the ball was extracted from the cancellæ of the external condyle of the femur; therefore, unless a fracture of some magnitude extends into the joint, do not amputate.

11. In compound and comminuted fracture of the knee-joint I should advise amputation, though there may be wounds made by bullets through the joint without doing much injury to the bone or soft parts, in which case it may be advisable to try and save the limb. This seems more advisable when we take into consideration the facts as recently elucidated by Dr. Lewis A. Sayre and others, that the joint can be opened freely without much risk of fatal results, and the cases spoken of in this paper where the patient recovered after ligation of the femoral artery, added to the fact of the frightful mortality attendant upon amputation, even in the lower third of the femur; and we have, I think, data sufficient to warrant the effort to save the limb, where there is not great comminution of the joint.

The simple fact that a ball has been, or is, embedded in the cancellated structure of the head of the tibia or condyles of the femur, does not warrant us in resorting to amputation, and particularly so where the joint is not opened. I have, in many instances, removed balls from these positions by the trephine and gouge.

12. In compound and comminuted fracture of the shaft of the tibia, or even tibia and fibula, from bullet wounds, amputation should not be practised, since hundreds who have *accidentally* escaped the surgeons have recovered with only slight deformity. I think as many will survive by simply treating these injuries as if they were ordinary compound fractures from any other cause as would from amputation, and of course with much more useful limbs.

I now know of at least a dozen cases which were destined for amputation that are now recovering, and most of them will be as perfect as before the injury. As soon as practicable after the injury the wounded man should be placed on a bed or stretcher, and kept there until consolidation of the bone takes place—or until removed to some permanent place for treatment. Extension sufficient to keep the limb to near its normal length. Lateral support given by means of sand-bags placed longitudinally to prevent inversion or eversion of the foot as well as for the proper support of the limb. Extension kept up with no bandaging, and the treatment proceeded with as previously detailed in analogous injuries of the thigh—or, as if it were an ordinary compound fracture of the leg; but under no circumstances should excision be practised. All that can be required is to enlarge the incision, and remove loose spicula and other foreign bodies. I may here state the great and potent reason why so many compound fractures do badly is the fact, that the injured limbs are either bound up tightly with bandage and splints, or carried from hospital to hospital without even the support of a stretcher; a proceeding which destroys even a limb with simple fracture, and much more one of compound and comminuted fracture.

13. Simple gunshot injuries of the ankle-joint do not necessitate amputation, while compound and comminuted fracture of this joint, and particularly where the arteries are much injured, may require amputation. Though with proper support, water dressings, irrigation, free incisions, etc., a great majority will recover without operative interference. The same rule is applicable to gunshot wounds of the foot as of the hand, and I can safely say that there is scarcely a bullet wound of the foot which requires amputation. I have seen the whole scaphoid bone carried away, and still a good recovery took place. So the destruction of the astragulus may occur, and still recovery may go on favorably. See the case of Garibaldi, in whose ankle-joint the ball remained for some weeks, and without unfavorable results.

15. In compound and comminuted gunshot injuries of the tarsal and metatarsal bones the same rule of action should be adopted as in like injuries of the hand, with the exception that a slight deformity is not of such vital importance in the former as in the latter.

No excision should be performed in the second or inflammatory stage.* If the operation cannot be performed before this stage sets in we ought to defer operation until the true second or suppurative stage.

In conclusion, I cannot urge too strongly the importance of having an abundance of stretchers for the immediate relief of the wounded, and particularly those wounded in the lower extremities, to which can be attached an india-rubber cover, in case of heavy dews or rains. By this means the patient is treated more successfully some days after injury than if he were transferred to close and ill-ventilated hospitals, houses, or even tents, since you avoid the danger of *foul* and pus-generating air. These appliances keep them from the wet above as well as below. There should be at least a sufficient number of these stretchers to supply all cases of amputations of the lower extremities, as well as compound and comminuted fractures of the same, where any effort is being made to save the limb; without them our efforts are futile, since the bedstead or stretcher becomes the splint. So in all cases of wounds of the trunk.

In excisions of the shoulder or elbow-joint, or in any severe injury of the shaft, where an attempt is being made to save the limb, these *appliances* are, to say the least, a *great auxiliary* to the *successful* treatment of this class of *injury*; and I might say, an *indispensable splint* or *support*.

The Long Island College Hospital commenced its session on Thursday, March 12, with an address by Prof. Enos. The class in attendance promises to be large.

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* I here present the condensed report of W. Van Steinburg, M.D., Surgeon to the 55th N.Y.S.V., who has treated twenty-one cases of compound and comminuted fractures of the thigh, two of which died. Of these there were three fractured in the upper third, and one death; twelve fractured in the middle third, and one death; six fractured in the lower third, and no death. These were treated by extension, supported by sand-bags applied in the long axis of the bone. This notice is due to the Doctor's sagacity and skill. The profession should know the comparative results, and I therefore submit his tables and remarks entire. If the Doctor could have taken the same cases from the field, and before material injury was done to the soft parts by bandaging and rough movement, placed them on stretchers, and kept them on the same with appropriate extension, his success would have been much more perfect, since after continued growing of the muscles has to any considerable degree taken place, extension cannot be effected as it could at first, and hence the imperfection spoken of. He says that: "Out of twenty-one cases of compound and comminuted fracture of the thigh taken indiscriminately, nineteen recovered with tolerably useful limbs. My plan of treatment has been by simple extension, as taught me by Dr. Swinburne. One case I will relate as well as possible from memory. Adjt. Wallace, 1st N.Y., was struck by a rifle-shot at the junction of the lower and middle third, the ball passing directly through "antero-posteriorly," comminuting the bone, and drawing the spicula into the muscles of the posterior part of the thigh. These I removed, and placed him on a stretcher, making extension from either end of said stretcher. I placed a leg of an old pair of knit drawers filled with sand upon each side of the broken limb, and told him not to suffer any one to remove him until he reached the General Hospital. He was taken to Washington and there placed upon a bed, and the extension kept up. The wound was made on the 30th of June, and in October he returned to the Regiment with a leg two inches shorter, and foot everted. The eversion was the result of neglect in treatment evidently."

* This Article divides gunshot injuries into three stages, the second of which is the congestive or inflammatory.

Progress of Medical Science.

PREPARED BY E. H. JANES, M.D.

BELLADONNA AND ATROPIA

Are, according to the *Med. Times and Gazette*, in favor at the Hospital for the Epileptic and Paralysed, as remedies for epilepsy. Under these remedies the patients are benefited, and though many cases are not cured, the number of fits is often diminished and the patient's general condition much improved. Many who have suffered for years are rendered capable of resuming a comparatively active life. The prescription generally used is extract of belladonna a quarter of a grain, quinine one grain, in a pill three times a day. Of atropine, the 1-120th of a grain is given three times a day. Both are gradually increased in dose, yet the only physiological effects observed are dryness of the throat and defective vision. The latter is in consequence of the ciliary muscle being partially or totally paralysed, by which the power of accommodation is impaired or altogether lost. One method of Dr. Brown-Sequard is, to inject a solution of atropine and morphia into a part from which an aura starts. A solution containing 1-60th of a grain of atropine and 1-4th of a grain of morphia is injected with Wood's syringe, sometimes with excellent results. He believes that belladonna and ergot both act by producing contraction on the blood-vessels; the former on those of the brain, the latter on those of the spinal cord. In paraplegia from myelitis, he gives a pill containing three grains of fresh ergot and a quarter of a grain of the extract of belladonna, three times a day. The action of belladonna in arresting the secretion of milk, and causing dryness of the throat, may be explained on the hypothesis of its diminishing the supply of blood to those parts.

OPIUM, CODEIN, ETC., IN SLEEPLESSNESS.

Instead of profuse administration of opium in delirium tremens, it is recommended to support the patient with tonics, stimulants, and nutrients; and when strong enough to bear it opium may be given. Dr. Brown-Sequard sometimes gives codein to produce sleep. It is not followed by the disagreeable effects which sometimes follow the administration of morphia. The dose, in a case reported, was two thirds of a grain, in pill. The amount of codein in opium is from 1-30th to 1-16th of that of morphia. At the Middlesex Hospital, Dr. Goodfellow employs subcutaneous injection of opium in order to get the patient asleep in delirium tremens. He thinks that it acts more quickly and produces less constitutional disturbance than when administered by the mouth.

POISONING WITH STRYCHNIA.

The Paris correspondent of the London *Medical Times and Gazette*, after giving some account of M. Gallard's researches on strychnia poisoning, thus concludes:—"Morphia and coneine have, in the hands of M. Gallard, not justified the hopes that were entertained of these substances. On the contrary, they have rather accelerated than retarded the death of those animals to which he administered as antidotes to strychnia. Atropine and inhalations of chloroform have also proved useless; and the only substance which seemed to have any beneficial effect was aconitine. An animal which had taken a dose of strychnia sufficient to kill it within ten or eleven minutes, survived two hours, and died at last with symptoms of poisoning by aconitine. Another animal, to which a small dose of the latter poison had been given, recovered perfectly after half an hour; three days after, in order to have an *Experimentum crucis*, the same animal was given the same dose of strychnia, after which it died in seventeen minutes. A third animal, however, which was poisoned with 2½ milligrammes of strychnia, died after seven minutes, in spite of the immediate administration of half a milligramme of aconitine, so that the latter cannot be considered an unfailing antidote to the former."

THE USE OF MEDICATED PESSARIES

is advocated in a paper read before the Obstetrical Society of London, by Dr. T. H. Tanner. In cases of uterine disease, to which medicated pessaries are adapted, a very convenient material for holding the drugs together is found in the butter obtained from the theobroma cacao nut, instead of wax or lard. When cold it has the consistence of wax, and may be readily applied by the patient herself, after which from the warmth of the vagina it soon becomes liquid. The following formulæ are recommended:—Mercurial ointment, four scruples; ext. of belladonna, one scruple; cacao butter, four drachms; olive oil, one drachm. Mix; divide into four pessaries, and order one to be introduced into the vagina every night. Iodide of potassium, one drachm; extract of conium, four scruples; cacao butter, four drachms; glycerine, one drachm. Mix; divide into four pessaries.

Reports of Societies.

UNITED STATES ARMY MEDICAL AND SURGICAL SOCIETY, OF BALTIMORE.

Stated Meeting, Feb. 12, 1863.

SURGEON C. C. COX, U.S.V., PRESIDENT, IN THE CHAIR.

[Reported by Geo. H. Dare, Acting Asst. Surg., U.S.V., Secretary.]

GUNSHOT FRACTURES.

Surgeon Z. E. Bliss, U.S.V., Vice-President of the society, opened the discussion by remarking that gunshot fractures could be reduced to three varieties, viz. 1, the *simple* (as where a spent solid shot strikes the limb, fracturing the bone without lacerating the soft parts); 2, *compound comminuted;* and, 3, the *compound complicated.*

He referred to the diagnosis of gunshot fracture, remarking, that it was not difficult to ascertain, by introduction of the finger into the wound, that a comminuted fracture existed, but that it was much more difficult and frequently impossible to determine the extent of the fracture. Especially was this the case in gunshot fractures near the joints. After amputation the bone was generally found more extensively injured than had been anticipated. He remarked that he would not speak separately of the different forms of gunshot fracture, but would proceed to give a few hints in reference to the question of primary amputation in gunshot wounds. Without attempting to lay down any general rule, which would be impossible with our present knowledge, he would not hesitate to assert that amputation would be advisable in a gunshot fracture of the knee-joint, producing extensive comminution, and that amputation would be necessary in a compound complicated gunshot fracture of any of the long bones, attended with extensive laceration of the soft parts, blood-vessels, and nerves, so as to preclude the possibility of maintaining sufficient vitality in the distal extremity of the limb to carry on the process of nutrition.

He would not advise primary amputation in compound and extensively comminuted gunshot fracture of the femur, where the femoral artery or knee-joint was not implicated; because almost every case of primary amputation of the femur for gunshot wounds, especially those above the junction of the lower with the middle third, results fatally, and we have a number of well authenticated cases, which have occurred during the present war, where soldiers, after severe gunshot wounds of the femur, have recovered with serviceable limbs, and some of them, too, under very unfavorable circumstances.

He would not advise primary amputation even in compound comminuted fracture of the humerus, where the brachial artery and vessels were uninjured, and there was no extensive laceration of the soft parts.

The removal of the spicula or comminuted portion of bone may be advisable in any case where the fragments are entirely detached, denuded of periosteum, the opening in the soft parts being large enough to admit of their easy extraction; but it is known that in a majority of cases the comminuted portions are either thrown by the slow process of suppuration, or become, as it were, revivified and unite with their fellows to form a connexion between the ends of the fractured bone.

The Doctor thought excision in the continuity of the humerus and femur, except in some rare instances, improper and unsatisfactory, especially in case of the femur. The same operation upon the bones of the forearm and leg had been more successful, particularly in secondary cases.

The operation of exsection of the joint, as a mode of treatment of gunshot fractures, involving the shoulder, elbow, and hip-joints, had not, as yet, been fully tested, but sufficient facts had been already obtained to prove that this operation often saves life and preserves a serviceable limb. The result depended to a great extent upon a proper selection of cases and the quantity of bone removed.

Dr. Bliss had removed the head of the humerus in two cases; he preferred and uses the letter S incision. In both cases the result was excellent. One especially proved highly satisfactory, the patient being able to carry his hand to his forehead and remove his cap without difficulty.

In speaking of the constitutional treatment, he advised generous diet and supporting treatment generally.

Assist. Surg. Cadden, U.S.V., reported a case as an exception to the rule laid down by Dr. Bliss—that after amputation the bone was usually found more extensively injured than had been anticipated. After the battle of Culpepper the question of amputation came up in the case of a man who had been shot through the femur a few inches above the knee by a fragment of shell. The continuity of the bone was not destroyed. The question was decided in the affirmative, on the ground that the bone had probably been fissured into the knee-joint. Upon examination of the limb, after its removal, an oblong hole was found through the femur about one inch in its longest diameter. The bone was not fissured in any direction. The hole resembled that made by a pistol bullet through a suspended pane of glass.

(*To be Continued.*)

FOREIGN CORRESPONDENCE.

LETTER XXIX.

By PROF. CHARLES A. LEE.

WINES, AND THE WINE-GROWING COUNTRIES.

Coblentz on the Rhine, Sept. 21, 1862.

I am strongly tempted to forego medical subjects, hospitals, mineral waters, lunatic asylums, cretins, climate, etc., and expatiate upon the fascinating scenery of this renowned river; and I would begin by saying that its banks present every variety of wild and picturesque rocks, thick forests, and fertile plains; vineyards gently sloping or perched among lofty crags, where industry has won a domain among the fortresses of nature; whose banks are ornamented with populous cities, flourishing towns and villages, castles and ruins, with which a thousand legends are connected; with beautiful and romantic walls, and salutary mineral springs; and whose waters offer choice fish, as its banks produce the choicest wines. I have traced its course from the Swiss canton of the Grisons, where 211 glaciers contribute to supply its sources, and 56 romantic waterfalls diversify the scenery, down to this city, and have not ceased to admire its beauties at every step. But all this I forego, and remembering that I am writing only for medical men I must confine myself to subjects in which they are more especially interested. I shall therefore speak at present of the Rhine wines, the culture of the vine, and the vintage in this region, together with other matters connected with the juice of the grape, believing that more definite information on these points is still a desideratum.

From Bonn to Coblentz, and from this city to Mayence, the country is covered with vineyards, although to the north of this the vines are of little comparative note. The latitude of this city is nearly 51° corresponding with the northern shores of Newfoundland, or the southern borders of Hudson's Bay: and yet the finest and most aromatic wines of the world are the product of this favored region. Nowhere, indeed, is the fondness for vine cultivation more evident in every grade and class of farmers than in the vine districts bordering on this river and its tributaries. The humblest peasant has his little vineyard. Every accessible spot on the declivities and among the rocks and precipices with an auspicious aspect, is decorated with the favorite plant. Owing to the sloping banks, from Mayence to Bonn, the vineyards on either side of the Rhine are in full view, and in no other country on the globe are they seen to such advantage. Here is Erbach enthroned among vines; here the Rheingau, with its famed Johannisberg seated on a crescent hill of red soil, with every cranny cultivated that admits of vegetation; here are Mittleheim, Geisenheim, and Dudenheim, the last with its strong fine-bodied wine, the grapes basking in their promontory of rock in the warm summer sun, imbibing its generous heat from dawn to setting; and then again on the other side is old Bingen celebrated in song, delightful, sober, majestic, adorned on every side by its terraces of vines; the summits of the lofty hills and crags everywhere crowned with feudal relics or monastic remains. At Coblentz the soil first becomes particularly well adapted for the cultivation of the grape, though the right bank of the river is most noted for its wines. The *Rheingau*, the most celebrated of all the wine-growing districts, consists of an area of ten miles in length by four in breadth, which has been known for many centuries for the excellent quality of its produce. The valley of the Rhine, taking from Mayence a western and north-western course, exposes it to the warm southwest winds, which have a very salutary effect on the maturity of the grape. The Riessling, a small white grape, is the one chiefly cultivated here; and although not well adapted for table has a finer and more aromatic *bouquet*, it is said, than any other grape known. It is in the centre of this district, on a gentle eminence on the right bank of the Rhine, and in plain view from the river, that the celebrated Johannisberg vineyard is situated. This small domain of only forty acres in extent, yields on an average about 9600 gallons of white wine annually, selling in 1859 at public sale, for 60,000 dollars. I am told that four qualities of wine are produced from this vineyard, the best selling for over seven dollars per bottle, or twelve thousand florins ($6000) per tun. The price of the different qualities varies from $1.50 to $7 per bottle. It is sometimes sold, however, by the cask, especially in bad years. The cellars or vaults are very extensive, but it is difficult to gain admittance to them. There are no gardens attached to the Chateau, as the ground is too valuable, nor are there any trees, except on the north side of the house, where is a sort of wilderness of limited extent. The best wine, I am informed, is the product of vines growing close under the Chateau, and, indeed, partly over the cellars. The rare excellence of the wines of this district is generally accounted for from the advantageous exposure to the direct rays of the sun, and the peculiar qualities of the slaty soil, which retains the heat of the sun's rays, so necessary for bringing the grape to maturity. This is proved by the fact already stated, that the best wines are confined to the north bank of the river, the valley being completely sheltered from north and east winds by the intervening barrier of mountains. A good deal, however, is evidently owing to the careful management of the vines, and the great care bestowed on the vintage. The grapes, for instance, are allowed to remain on the vines as long as they can hold together, and the vintage never takes place till the grapes are more than perfectly mature. The vineyard is divided into small compartments, the produce of each of which is put into separate casks, and even in the best years there is a difference in the value of different casks.

In bad years the wine never goes into the cellars, but sells at once for what it will fetch. The best of the Rhine wines, after being fermented in casks, are repeatedly racked, and then suffered to remain for years in large reservoirs to acquire perfection by time. These huge casks contain 350 tuns. The Germans have always held that wines mellow best in large vessels, hence the celebrated Heidelberg tun, 31 feet long by 21 high and holding 600 hogsheads. Hence, also, the enormous tuns of Tübingen, Gruningen, and Konigstein, the last of which contains 3709 hogsheads. All these tuns were formerly kept carefully filled. Some of these I have examined, but could not ascertain that they had been filled for many years past. I have mentioned the Biessling grape, but there are also the Klimberger, the Traminer, and the small Orleans variety, all of which are cultivated in the Rheingau and produce excellent wines. The laborers are strictly forbidden to eat any grapes under the penalty of the loss of future employment, and during the vintage they are allowed double wages. The common wine-press is used. The gathering of the grapes is not completed at once, none but the ripest being picked, so that there are as many as three or four distinct pickings. Dry and fine weather is deemed indispensable for the vintage. For the choicest wines the ripest of the best kinds of grapes, grown in the most favorable situations, are cut off with small scissors, and after lying twenty-four hours are pressed separate from the rest.

The Rheingau is divided into the Upper and Lower Cantons, relating to the position of the vineyards near the summits of the hills, or on the margin of the river. The high grounds produce the strongest wines, while that of the lower ground has an earthy taste—the intermediate being considered the best and most wholesome, though much depends on the season. The Johannisberg and Steinberg rank first among the Rhine wines, and are on an equal footing as regards flavor and bouquet. Next to these follow Rudesheim, Markobrunner, and Rothesberg, all of which possess much body and aroma. The Hockheim grows on the banks of the Maine near Frankfort, and ranks with the best of the second class Rhine wines. Of the inferior wines the Erbach and Hattenheim are the best. But the lighter wines are apt to be hard and rather acid as table wines. The Laubenheim and Neirstein, from the Palatinate above Mayence, and the delicately flavored Moselle, are much preferred to them as table wines in Germany. The best red wine is the Asmanshausen, produced from vines originally brought from Burgundy. But the vine chiefly cultivated on the Rhine is the Riessling. All German wines have been called *Hock*, but this name is derived from and properly belongs to that produced at Hockheim near Frankfort, above mentioned, which stands in the midst of vineyards, on elevated ground and exposed to the full blaze of the sun. I found that the vineyard which produces the Hockheimer of the first growth is only about eight acres in extent, well sheltered from the northerly winds, on the side of a hill behind the deanery. But the average summer heat here is not sufficiently great, oftener than once in five or six years, to perfect a vintage of superior quality. The relative proportions of the different elements which enter into the composition of grape-juice, as sugar, albumen, gluten, pectine, gum, coloring matter, tannin, volatile oil, bitartrate of potash, etc., are so modified by the nature of the vine, quality of soil, and especially the heat of the climate, that there are few crops so uncertain as that of the vine, to say nothing of the *oinium* or other diseases which have of late years attacked this plant. The present season promises to be one of the most productive ever known, the vines everywhere being loaded with fruit. It is a well known fact in this region that wines of equal flavor and equal quality are rarely produced in two consecutive years, while in districts like this, on the very verge of the protective limits of the vine, its produce is still more variable and inconstant. I find the limits to the culture of the vine in Europe are generally fixed where the mean temperature is from 50° to 52° F., and I believe no drinkable wine can be produced under a colder climate. But the isothermal line of 50° which passes through Belgium in lat. 51°, in our country passes near Boston in lat. 42° 30′.

American Medical Times.

SATURDAY, MARCH 28, 1863.

ABORTION—ITS PREVALENCE, AND THE DUTIES OF THE PROFESSION.

The appearance in the courts of two abortionists within a short period, to answer to the charge of homicide, and the introduction of a more stringent Act against this crime into the Legislature of New York, are suggestive of the query—"How far does this evil exist at present in American communities, and what is the popular opinion in regard to this crime?" If viewed in the light of an ancient civilization, the question would seem to have some pertinency, but it appears the most obvious anachronism to canvass the frequency of this crime, and the state of popular opinion in regard to it, in a Christian community. Nevertheless, the fact of the existence of abortion as a common and even increasing evil, appears in our mortality records; and the evidences that the public do not look upon it as a flagrant crime, and regard its abettors as criminals, become painfully apparent when the horrible developments of murder, by the infamous acts of abortionists, are revealed.

The proportion of still-births to the living gives the only basis on which can be calculated the number of cases of abortion. These figures are, however, but approximative, for very many cases of still-birth are not produced abortions, while a vast number obviously escape detection and registration. Taking our mortality reports with all due allowance for these discrepancies, the record is still sufficiently humiliating. From these, it appears, that since the first registry in New York, in 1805, the proportionate and actual increase of still-births has been alarmingly rapid. In 1805, the ratio of fœtal deaths to the population was 1 to 1,633, but in 1849, 1 to 340. In 1856, the records show that 1 in every 11 is still-born in this city, while the reports of European countries, even allowing for criminal abortions, give the proportion of still-births at 1 in 15. Accurate records of the best practitioners give, as the ratio of premature births, or non-viable fœtuses, to the whole number of births, which includes, of course, only abortions from natural or accidental causes, 1 to 78; but in New York the ratio of the same births to the whole number is 1 to 40. The ratio of premature still-births at full time in this city, in 1846, was 1 in 10, and in 1856, ten years later, it had increased to 1 in 4. From these facts it is apparent, not only that produced abortions are frequent in this community, but that they are rapidly increasing. In seven years, from 1850 to 1857, the still-births doubled, and we have good evidence that since that period the proportion has rapidly increased.

New York may justly be taken as an index of this country. It certainly does not give an exaggerated representation. The registration returns of the State of Massachussetts show that the comparative frequency of abortions in that State is thirteen times as great as in New York city.

Allowing that some discrepancy in the returns must exist, they still prove the general prevalence of this crime in one of the most intelligent and moral communities of the United States. Whoever examines the advertising columns of country papers, and marks the large number of nostrums which in various and cunning phrases are recommended as certain to effect abortion, cannot doubt the wide and almost universal prevalence of this crime. It is painful to believe that the public conscience is not alive to the moral turpitude of abortion. And yet we have frequent evidence that it not only is not shocked at the criminality of the act, but that it even regards with indifference the revelations of the scenes of cruelty, debasement, and utter loss of every virtuous impulse which the courts often reveal to the public gaze. The horrible tale of seduction, abandonment, suffering and death brought to light in the case of Miss Anderson passed without a comment. On the contrary, it is to be feared that it was read by not a few with as much interest and as little profit as the idle tales of the magazines. It cannot be denied that in every grade of society lax opinions of the criminality of procured abortion exists. It is not alone the ignorant and vicious that consider it no crime; the religious equally entertain the belief that abortions may be practised without a shadow of guilt. Every physician must have been approached by persons of upright motives with solicitations to prescribe remedies or employ means which would terminate an early pregnancy. There cannot be a doubt that the public mind to-day is inclined to regard abortion as a crime only under certain circumstances. The life that is sacrificed is regarded as unreal, and the convenience or comfort of the parents is alone consulted.

Who is responsible for the tone of the public sentiment on the question of the criminality of abortion? We believe it rests entirely with the medical profession. Medical men know well that abortion is the sacrifice of human life; they know well, therefore, the heinousness of the offence. In their daily intercourse with their patients they have the opportunity and the power of inculcating correct opinions of the nature of this crime. Every truly conscientious physician performs this duty faithfully, and often most effectually; the erring and unthinking are instructed, and the lesson makes a profound and lasting impression. But there is a class of physicians who treat this subject with so much indifference that they sanction rather than discountenance the crime. In mild terms they object to employing means to produce abortion, and yet suggest the remedies by which it may be accomplished. The effect is pernicious, as the crime is generally perpetrated. There is still another class of medical men, standing on the boundary between legitimate medicine and quackery, who both advocate and practise abortion. They assume a sanctimonious air and a clerical dress, and under this specious guise practice the black art of abortionists. They are found in the most respectable medical circles, and make their professional associations subserve their base purposes. Judged by the moral code of a Christian civilization, they are the most abandoned criminals in the community, and should be thoroughly purged from the profession. In this city the Academy of Medicine, and in the country the Medical Societies, should inquire "Have we not abortionists among us?" We do not doubt that they will be found, and that too in startling numbers, especially in large cities.

The whole question of abortion, its religious, social, and professional bearings, should be discussed in all medical societies. The duties of our profession to itself, to religion, to the cause of humanity, should be established on a righteous basis, and every member should be compelled to conform his conduct to this standard.

THE WEEK.

The prevalence of typhus and typhoid fevers in the army, in military, and in many civil hospitals, is worthy of notice. In many instances the fever seems to be purely typhus, and very contagious. We hear almost daily notices of the sickness, and, too frequently, of the death of medical attendants. In another column we record the deaths of two members of the resident staff of Bellevue Hospital during the same week. It is to be feared that typhus may yet be prevalent in the military hospitals. To guard against this should be the study and effort of every surgeon in charge.

We are glad to learn that the Bill to provide additional aid for the sick soldiers from this State introduced into the Senate, does not meet with the favor of the profession or the public. It has not been reported from the Committee to which it was referred, and we hope it never will be in its present form. We desire to call attention to the letter of Surgeon-General Hammond to Dr. Quackenbush, Surgeon-General of this State, which must satisfy every person, that all such legislation is not only uncalled for, but most pernicious.

We cannot see the justice of the strictures which army surgeons often make against the Medical Department in relation to the furnishing of medical and hospital supplies. The supply table is certainly sufficiently full for all practical purposes. It was prepared by a Committee of eminent physicians and pharmaceutists, and embraces a more liberal supply of articles and drugs than is furnished to any army in the world. Much of the fault of not having a supply depends upon the negligence of the medical officers themselves, who do not promptly and properly order them. The following extract from the circular of the Surgeon-General, accompanying the supply table, shows how liberal the Department is in furnishing hospital materials:—

"The standard of medical and hospital supplies for the army is the following supply table. It is not the design of the Department to confine medical officers absolutely to that table, either in quantity or quality, but only to establish a standard for their guidance in making requisitions for supplies, leaving individual preferences to be indulged at the discretion of the Medical Director or the Surgeon-General. Neither is it supposed that the quantities of the table will always meet the necessities of unnusual emergencies, as during epidemics, or in unhealthy seasons and localities; and medical officers who allow their supplies to be exhausted through any contingencies, without timely notice of their approaching necessities, will be held to a strict accountability.

"Medical Purveyors are charged, under the direction of the Surgeon-General, with the selection and purchase of all medical and hospital supplies for the army. In all cases of emergency they may provide such additional accommodations for the sick and wounded of the Army, and may transport such medical and hospital supplies as circumstances may render necessary. In all cases of emergency they shall promptly issue supplies on special requisitions made directly upon them, and such special requisitions shall consist simply of a list of the articles and quantities required, and be dated and signed by the medical officer who makes the requisition."

Army Medical Intelligence.

STATE AID IN THE CARE OF THE SOLDIERS.

LETTER FROM SURGEON-GENERAL HAMMOND TO THE SURGEON-GENERAL OF THE STATE OF NEW YORK.

Surgeon-General's Office,
Washington, D. C., March 2, 1863.

Sir:—I have the honor to acknowledge the receipt of your communication of the 25th ult., inclosing the copy of a bill proposed to be enacted by the Legislature of the State of New York, and asking my views upon the same.

I have read the bill very carefully, and whilst admitting the correctness of the motives by which its framers have been actuated, I am satisfied, from much experience, that its chief effects will be to create trouble and confusion, to cause ill-feeling between the representatives of the United States and the State, and to injure those whom it is intended to benefit.

I am satisfied that no military commander, who has the good of his troops at heart, would allow any agent of any State to interfere in the manner proposed in this bill. It would be found, in practice, wholly inoperative, and lead to the results indicated above, without any corresponding advantage being received.

Doubtless there are deficiencies in the medical administration of the army, as there are in all other departments. Perfection is impossible of attainment; but if I, with all my efforts, with the assistance of Medical Inspectors, Medical Directors, and over five thousand Surgeons and Assistant-Surgeons, together with the support of Commanding Officers, and all branches of the Federal Government, and the control of over ten millions of dollars per annum, cannot reach it, I am certain the agents of the State of New York will not be able to do better.

I, therefore, hope you will use your efforts to defeat this bill.

I am not alone in my opinion in regard to it, as all to whom I have mentioned it, including several officers of rank, agree with me that its passage would be most unwise.

I hope you will excuse me for the freedom with which I have written.

I am, sir, very respectfully, your obt. servt.,
William A. Hammond, *Surgeon-General.*
J. V. P. Quackenbush, M.D.,
Surgeon-General of New York, Albany, N. Y.

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Headquarters Department of the Tennessee }
before Vicksburg, March 6, 1863. }

Ass't-Surg. Gen'l R. C. Wood, *St. Louis, Mo.*

Dear Sir:—Your letter showing the efforts you have been making to supply everything necessary pertaining to the Medical Department in this Army has been received. I can assure you nothing has been left undone here to secure the health of the men. No army ever went into the field better provided with medical stores and medical attendants than is furnished the Army now in front of Vicksburg.

There was a deficiency in Volunteer Surgeons, but now that deficiency is fully supplied. The hospital boats are supplied with their own Surgeons, nurses, and everything for the comfort of the sick. The Purveyor's Department not only has everything usually furnished the sick, but more than I ever dreamed was ever furnished an Army, more than the great majority of men could have at home. Then, too, there is not that amount of sickness persons would be led to believe from the statements in the public prints. I question whether the health of the St. Louis forces is better to day than that of this command.

On arrival here, the men had been pent up so long a time on steamers, then camping on low ground and in the most terrible weather ever experienced, there was for a time necessarily a great number of sick. Surgeon Laub has been sick ever since he arrived here, and entirely unfit to attend to any of his duties. The Dr. is not willing, or at least has never intimated a willingness to give up. I have, however, found it necessary for my own relief to order him away. The duties would be sufficient for the Doctor if in good health. As he is he is entirely incapable of them, and his desire to perform his duties would prevent his recovery, if he should be kept here.

Very respectfully,
Your obed't serv't,
U. S. Grant,
Major-General.

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CHANGES, ORDERS, &c.

The following named gentlemen have been appointed Surgeons of Volunteers: Drs. J. W. Fitzpatrick, J. M. McNulty, G. B. Twitchell, John Nell, R. M. S. Jackson, W. H. Gobrecht, Sanford B. Hunt.

The following named Assistant Surgeons of Volunteers have been promoted to be Surgeons: Assistant Surgeon Ferd. Hayden, Chas. Hayden, Geo. R. Mayo, J. D. Brumley, J. R. Ludlaw, William Moss, Joseph H. Wythes, A. M. Clark, S. B. Davis, John Wilsan, E. D. Kittoe, S. S. Milford.

The following named persons have been appointed Assistant Surgeons of Volunteers: Drs Ernst W. Thurm. J. R. Ludlaw, J. D. Brumley, S. D. Carpenter, Charles Mayo, J. R. D. Lunde, W. Applegate, Ferd. Hayden, A. L. Braden, R. W. Pease, D. Johnson, Alexander M. Speer, B. W. Wilson, J. J. De Lamater, H. B. Buck, E. F. Bates, D. B. Hannan. J. W. Mintzer, J. W. Merriam, H. P. Mathewson, J. H. Peabody, D. S. Gloninger, S. D. Turney, G. R. Weeks, H. N. Fisher, J. B. Morrison, W. K. Moxley, W. W. Wythes, Henry Janes, C. F. Haynes, A. C. Benedict, J. M. Laing, Francis Greene.

Leave of absence has been granted to Acting Assistant Surgeon Thad. P. Seely for fifteen days, and to Surgeon Jas. S. de Benneville, 11th Pennsylvania Reserve Corps, for thirty days.

Dr. William Goodell, of Westchester, Pennsylvania, has declined the appointment of Surgeon of Volunteers, and Dr R. S. Gloninger, of Philadelphia, the appointment of Assistant Surgeon of Volunteers.

Assistant Surgeon L. D. Harlow, U.S.V., in charge of General Hospital, Fourth and George Street, Philadelphia, has received orders to close that hospital, and report to the Medical Director for duty.

Surgeon G. W. Stipp, U.S.A., has been ordered to break up the Union Hospital at Georgetown, D. C., and turn over the property to the appropriate Departments, transferring the sick to the Carver Hospital.

Acting Assistant Surgeon F. G. H. Bradford, U.S.A., has been assigned to Eckington Hospital, Washington, D. C.

Assistant Surgeon M. H. Picot, U.S.V., to Lincoln Hospital, Washington, D. C.

Acting Assistant Surgeon J. C. Nelson, U.S.A., to Mountpleasant Hospital, Washington, D. C.

Leave of absence for twenty days has been granted to Surgeon S. N. Sherman, U.S.V.

Surgeon Francis Salter, U.S.V., is on duty with General Crooke, at Carthage, Tenn.

Surgeon G. W. Varnum, U.S.V., has been assigned to duty in charge of the Marine Hospital at St. Louis, Mo.

Assistant Surgeon W. B. Chambers, 69th New York Vols., and Charles L. Fisher, Scott's "900" New York Cavalry, have been mustered out of service to enable them to receive promotion.

Leave of absence for seven days has been granted to Acting Assistant Surgeon W. F. Munroe, U.S.A.

Assistant Surgeon C. W. White, U.S.A., has been ordered to report to the Medical Director, Middle Department at Baltimore, Md., for duty, to relieve Surgeon R. C. Stiles, U.S.A., who on being relieved will report in person at the Headquarters Army of the Potomac.

Assistant Surgeon J. F. Randolph, U.S.A., has been promoted to be Surgeon U.S.A.

Medical Inspector E. P. Vollum, U.S.A., has been ordered to proceed to General Grant's Headquarters and examine into the administration and condition of the Medical Department under that officer's command, and such other subjects in reference to medical administration as the Surgeon-General may direct.

Surgeon E. J. Baily, U.S.A., to report to the Medical Director at Baltimore, for duty in charge of the General Hospital at Wilmington, Del.

Surgeon E. McDonnell, U.S.V., to report in person at the Headquarters of Major-General Grant, and by letter to the Assistant Surgeon-General at St. Louis.

Surgeon Herman B. Linton, 175th Pennsylvania Vols., having tendered his resignation, has been mustered out of the service for neglect of the sick and inefficiency, as recommended by his Colonel, Brigade, Division and Department Commanders.

Surgeon A. K. Smith, U.S.A., has been ordered to report to Surgeon R. Murray, Medical Purveyor at Philadelphia, Pa., for duty in connection with the preparation of Medical Supplies.

Leave of absence for twenty days has been granted to Surgeon W. B. Little, 32d New York Vols.

Surgeon J. H. Herbst, U.S.V., has been assigned to duty as Surgeon-in-Chief, 2d Division, 12th Army Corps, Army of the Potomac.

Surgeon W. D. Stewart, U.S.V., has been assigned to duty in charge of the General Hospital at Mound City, Ill.

Surgeon H. J. Churchman, U.S.V., has relieved Surgeon Ira Russell, U.S.V., in charge of the General Hospitals at Fayetteville, Ark.

Surgeon O. M. Bryan, U.S.V., is on duty at La Mesilla, Arizona.

Surgeon J. E. Quidor, U.S.V., is on duty as Inspector of Hospitals at Memphis, Tenn.

Assistant Surgeon Adam Garrison, Independent City Guards, Virginia Vols., having tendered his resignation, has been discharged the service to date January 9, 1863.

Surgeon J. Q. Osborne, 42d New York Vols., now on leave of absence, has been ordered to rejoin his regiment without delay.

Obituary.

PROFESSOR CHARLES HOOKER, M.D.

Prof. Charles Hooker died in Newhaven, Conn., on March 19. He was a native of Berlin, Conn., and a descendant of the leader of the first settlers at Hartford, the Rev. Thomas Hooker. He graduated with honor in Yale College, in 1822, in the class of which President Woolsey and Dr. Bacon were members. On graduating from the Medical Institution of the College, he began practice in Newhaven, and from that time has been known as one of the busiest and most indefatigable men in the community in which he resided. In 1828 he was appointed to the chair of Anatomy and Physiology, which he retained until his death. Prof. Hooker was the author of several valuable papers. In his death the profession has lost one of its most esteemed members.

William Henry Cooke, M.D.
William Henry King, M.D.

Dr. Cooke was a native of West Hampton, Mass. He commenced the study of his profession with Dr. Dunlap, an eminent practitioner of Northampton, Mass., and attended his first course of lectures at the Berkshire Medical School. He subsequently was entered as a pupil of Prof. Parker, of this city, and graduated at the College of Physicians and Surgeons in 1862. He took the Harsen prize, being a Clinical Report from the wards of the New York Hospital. He entered Bellevue Hospital April 1st, 1862, and was senior assistant physician at the time of his death. Dr. Cooke was an indefatigable student, and gave promise of future eminence in his profession. His last contribution was an interesting and well written paper on the Diarrhœa of Soldiers, as it appeared at Bellevue Hospital, which appeared in the Medical Times of February 28.

Dr. King was born at North Egremont, Mass. Left to his own resources, he obtained a good education, and supported himself for several years as a teacher in New Jersey. He pursued the study of medicine with Dr. Richard Beebee, of South Eginton, and Dr. Holmes, of Cranbury, N. J. He graduated at the Bellevue Hospital Medical College in 1862, and entered the hospital department in April of that year. He left the hospital but two or three weeks preceding his death, and engaged as a contract physician in the U. S. General Hospital, at Newark, where he was attacked with the fever of which he died.

The following Resolutions were passed by the Resident Medical Staff of Bellevue Hospital :—

Bellevue Hospital, March 23, 1863.

Whereas, in the midst of the faithful performance of their professional duties, the wisdom of an inscrutable Providence has deemed it proper to remove from our number Henry W. Cook, M.D., and Wm. H. King, M.D.

Therefore be it Resolved, That in their death we feel poignant sorrow and regret in the loss of those who have been associated with us in the closest ties of friendship and love, as well as in the common interests of a self-sacrificing profession.

Resolved, That with the Relatives and Friends of our deceased associates, we do sincerely mourn, as for a common brother; and that, as an expression of our loss, we will wear the usual badge of mourning thirty days.

W. R. Gillette, T. K. Chandler, H. E. Paine, *Committee.*

Medical News.

College of Physicians and Surgeons.—The Annual Commencement of the College of Physicians and Surgeons took place March 12th. President Delafield conferred degrees upon the following graduates:

Wm. B. Almon, Nova Scotia; W. A. Anderson, Maine; B. A. Ball, A.B., New York city; Joseph Bird, A.B., New Jersey; Lewis H. Bodman, Massachusetts; Garobed Caloosdian, Turkey; W. M. Carpenter, Madison county, New York; John E. Cary, New Jersey; George A. Christie, Nova Scotia; Ed. Cowles, A.B., M.D., Vermont; A. E. Croucher, Nova Scotia; W. F. Cushman, A.B., New York city; Rezin P. Davis, Virginia; Walter De. F. Day, A.B., Greene county, New York; D. O. Farrond, Michigan; Samuel A. Fitch, A.B., Delaware county, New York; De Witt C. Fowler, Onondaga county, N. Y.; W. R. Gillette, A.B., New York city; Frank West, Goodall, Vt.; W. B. Griswold, A.B., Connecticut; Chas. E. Hall, New York; W. H. Harlin, Kings county, N. Y.; Frank G. Hasbrouek, Rockland county, N. Y.; John C. Hasbrouck, Ulster county, N. Y.; Solomon E. Hasbrouck, Ulster county, N. Y.; D. W. Hodgkins, New York city; E. K. Hogan, New York city; J. Hutchinson, New Brunswick; Woolsey Johnson, A.B., New York city; Chas. S. Kittredge, New Jersey; William Lee, District of Columbia; Elias Lester, Cayuga county, N. Y.; Wm. S. Ludlam, New York city; Irving W. Lyon, M.D., New York city; G. V. R. Merrill, Chemung county, N. Y.; Henry E. McCortin, New York city; Theodore A. McGrow, Michigan; M. A. Miller, New York city; Lucius Mills, Ohio; Sherman Morse, Yates county, N. Y.; John D. Nicoll, Orange county, N. Y.; Wilbur F. Matten, Wayne county, N. Y.; Patrick Pendegrast, New York city; Peter V. S. Pruyn, A.B., Columbia county, N. Y.: Burr Schermerhorn, Schenectady county, N. Y.; A. O. Shaw, Maine; Amos Shaw, Jr., New Jersey; Andrew J. Smith, Joseph G. Smith, Schenectady county, N. Y.; Thomas Thompson, Delaware county, N. Y.; Lewis A. Tracy, Connecticut; Walter H. Wentworth, Columbia county, N. Y.; Lewis Westfall, Washington county, N. Y.; Jas. H. Wheeler, New Hampshire; Benj. Wilson, Wayne county, N. Y.; G. S. Winston, New York city; L. De Forrest Woodruff, New York city.

President King of Columbia College delivered the charge to the graduates; A. Brayton Ball the valedictory; and Dr. W. C. Roberts the address to the Alumni. A. Brayton Ball received the first prize of fifty dollars, for an essay on "Hospital Gangrene," and James H. Wheeler the second, of twenty-five dollars, for a dissertation on pneumonia.

At the Annual Commencement of the Medical Department of the University of Buffalo, the following gentlemen received the degree of *Doctor in Medicine:* Heman Potter Babcock, Buffalo, Erie County, N. Y.; Gilbert Birdsall, Butternuts, Otsego County, N. Y.; Andrew Thomas Dunn, Brockville, Leeds County, C. W.; James Usher Babcock, Elmira, Chemung County, N. Y.; Howard Wellington Vickery, Darien, Genesee County, N. Y.; George Dean, Sullivan, Chemung County, N. Y.; Edwin Booth, Jelloway, Knox County, Ohio; Benjamin Booth Ross, Belleville, Hastings County, C. W.; Nehemiah Osborn, Belleville, Hastings County, C. W.; Robert Wickliffe Gifford, Ashtabula, Ashtabula County, Ohio; John Henry Tanner, Hartford, Cortland County, N. Y.; James Dormid, De Ruyter, Madison County, N. Y.; Asa John White, Mecklenberg, Schuyler County, N. Y.; Dascomb Allen Farrington, East Aurora, Erie County, N. Y.; Andrew Jackson Scott, Loudonville, Ashland County, Ohio.; Orlando L. Abbey, Union Mills, Erie County, Pa.; John Coventry, Clarkville, Kent County, C. W.; Earl Byron Lonusbury, Bethany Mills, Genesee County, N. Y.; Fletcher Miller Follett, Machias, Cattarauges County, N. Y.; Daniel Winter, Pekin, Niagara County, N. Y.; David Hershey, Fort Erie, C. W.; Edwin Parker Moore, Jamestown, Chautauqua County, N. Y.; Jeremiah Andrews, Sugar Grove, Warren County, Pa.; Edward H. Beaman, Ridgeway, C. W.

Original Lectures.

A CLINICAL LECTURE ON TYPHUS AND TYPHOID FEVER.

DELIVERED AT THE

FEVER WARDS OF BELLEVUE HOSPITAL.

By ALFRED L. LOOMIS, M.D.,

PHYSICIAN TO THE HOSPITAL.

PART I.

GENTLEMEN—A general review of the cases of fever which we have been studying in detail the past two months (February and March), as they have occurred in the male fever ward of this hospital, will, it seems to me, bring out points of practical importance; especially so, as accurate histories of the most interesting cases have been recorded by the late Dr. Henry W. Cook, acting House Physician.

There have been received and treated in the ward during February and March forty well marked cases of fever. In tracing out the locations in the city from which each one was admitted into the hospital I find that thirty-two of the cases originated in the immediate vicinity of the *Five Points*—in Baxter, Mulberry, and Chatham streets; four sickened in the hospital, two of which number were attendants upon the fever ward; the remaining five came from different parts of the city, none of whom presented symptoms characterizing those cases which originated about the Five Points.

Thirty-four have presented symptoms which I have told you were characteristic of typhus; six more presented equally as well marked cases of typhoid.

Ten have died; three of whom died on the eleventh day; two, on the twelfth; one, on the thirteenth; two, on the fourteenth; one, on the fifteenth; and one, on the sixteenth. Of those who recovered, convalescence was established in all but eight by the fourteenth day. Eighteen were under twenty years of age, with but one exception, all of whom recovered. Six autopsies have been made, in only two of which were there found any lesions of Peyer's patches, or noticeable softening of the abdominal viscera.—In four (in which death had been preceded by coma) the characteristic typhus lesions of the brain were present, the vessels of which in every instance were engorged; the arachnoid distended with serous effusion, the convolutions sharpened, and the substance of the brain harder than natural; the cut surfaces were studded by numerous spots. In three of these cases the kidneys were engorged, and presented marked evidences of fatty degeneration.

The following abstract from the histories recorded by Dr. Cook, will enable us more readily to recall the points of importance that have engaged our attention in the different cases.

James Madden, aged twenty-two, took to his bed on the 3d August. On the fifth became delirious; on the sixth a petechial eruption appeared over the whole surface of the body, which ceased to disappear on pressure after two days. Was insensible on the tenth; on the fourteenth was convalescent. The greatest frequency of the pulse was on the 12th August, being 120. The greatest amount of stimulants administered in any one day was sixteen ounces. Subsultus tendinum slight; bowels moved once each day, no diarrhœa or tympanitis. There was intense heat of skin during the first week.

James Lary, aged 24. Took to his bed on the fifth day. On the eighth day was delirious at night; abdomen becoming tympanitic. On the ninth, a rose-colored eruption appeared on thorax and abdomen (disappearing on slight pressure) remaining five days. On the tenth, diarrhœa was present. Slight hæmorrhage from the bowels occurred on the fifteenth day, and on the sixteenth (following day) he died from profuse intestinal hæmorrhage. Pulse ranged from 94 to 104. Greatest amount of stimulants given in any one day was 24 oz., but subsultus marked the last three days. Diarrhœa at no time troublesome; the hæmorrhage from the bowels came on unexpectedly.

The only lesions revealed by the autopsy were the inflammations and ulcerations of Peyer's patches, with morbid softening of the abdominal viscera. There were no sub-arachnoid effusions or morbid engorgement of the brain.

William Flagg, under 20 years of age. Took to his bed on the seventh day. A scanty rose-colored eruption, disappearing on slight pressure, appeared on the twelfth day, remaining five days. On this and the three successive days slight diarrhœa and tympanitis were present. Pulse never higher than 94; no delirium; no treatment. Convalescence was established on the twentieth day.

John Walker, aged 23, of very intemperate habits; was taken ill after a "hard spree." A petechial eruption appeared over the whole surface on the seventh day, which disappeared slightly on pressure for two days, and then was permanent. On the eighth there was active delirium, which on the following day became so violent that it was necessary to put him in a "strait-jacket." The greatest amount of stimulants was administered on the eleventh, being forty oz. On the twelfth day patient was unable to swallow, and stimulants, with nourishment, were administered per rectum. On the fifteenth day convalescence was established, the stains of the eruption only remaining on the surface. The patient's bowels were constipated through the whole illness. Pulse ranged from 112 to 140, at times almost imperceptible, but always responding to stimulants. On the twelfth day he passed into a state of almost complete coma, from which he rallied on the thirteenth. It was interesting to watch the effect of stimulants on this patient; his pulse responding so promptly to their influence when almost imperceptible.

Thos. Kane, aged 16. Took to his bed on the fourth. On the sixth, a petechial eruption appeared over the whole surface of the body, not disappearing on slight pressure after the second day; delirium slight at night. On the thirteenth, convalescence was established. Pulse ranged from 112 to 120. No tympanitis; no diarrhœa. The greatest amount of stimulants administered in any one day was 12 oz.

James Doyle, aged 37. When admitted into hospital was in a semi-comatose condition, was unable to give any account of himself—a petechial eruption of dark color (not affected by pressure) over whole surface; no tympanitis; pupils act slowly to light. Pulse almost imperceptible, and 160 per min. Stimulants administered *ad libitum*, to which no response was obtained. Died comatose twenty-four hours after admission. Autopsy revealed vessels of brain engorged with dark blood, and large amount of sub-arachnoid serous effusions; brain substance harder than natural. No inflammation or ulceration of Peyer's patches. Kidneys very large, and intensely congested, the right presenting marked evidences of fatty degeneration.

Charles Shultz, aged 48. Had typhoid fever in the hospital, in August 1862; remained in the ward as helper until taken sick. Took his bed on the second day, after a distinct chill. On the seventh day a petechial eruption appeared over the whole surface of the body; delirium slight. Patient apparently doing well, until the eleventh day, when he suddenly passed into a state of coma, and died after a few hours. Pulse ranged from 120 to 140. Bowels constipated. Largest quantity of stimulants administered in one day was 16 oz., which was sufficient to control the pulse up to the eleventh day.

Autopsy revealed no lesions of Peyer's patches. Kidneys presented unmistakable evidences of Bright's disease far advanced. The usual typhus lesions of the brain were found. This case in some respects was peculiar—the patient had recovered from typhoid only a few months before. There was an almost entire absence of nervous symptoms. The greatest frequency of pulse was during the first days of his illness. His sudden death was not anticipated, his condition a few hours previous to the coma being more favorable than at any other time.

Wm. McDermott, aged 70, had been an inmate of the hospital one year; being a quiet man was seldom known to leave his ward, and there had been no cases of fever in his ward. The cause of the disease in this case must have originated within himself, and been the result of endemic influences. The disease was ushered in by vomiting. On the fifth day a petechial eruption over abdomen, thorax, and limbs. Slight delirium on the ninth day, which continued until the twelfth. No tympanitis nor diarrhœa. Convalescence was established on the thirteenth day, when the stains only of the eruption remained. Pulse ranged from 100 to 120, and very feeble, but responded well to stimulants; largest amount of stimulants administered in one day was 20 oz.

James Fortescue, æt. 42, was watchman in the fever ward; was taken ill with a chill and so severe vomiting as to compel him to take his bed the first day. A petechial eruption appeared over the whole surface on the fifth day; delirium on the ninth day, which increased in violence for four days, when the patient passed suddenly into a state of coma, and died in twelve hours. His pulse ranged from 112 to 120, being very feeble the three last days of life, and not responding to stimulants. The greatest amount of stimulants was administered on the eleventh day, being 68 oz. He died on the thirteenth day. No autopsy could be obtained. Stimulants seemed to have no beneficial effect in this case, not even to increase the force of the pulse.

Alex. McCoy, æt. 28, took to his bed on the fourth day; a petechial eruption appeared over the whole surface on the sixth day; delirium occurred on the seventh, which increased in violence until the twelfth. On the fourteenth convalescence was established. The pulse ranged from 112 to 120, but perfectly controlled by stimulants. The greatest quantity of stimulants administered was on the twelfth day, being 24 oz.

John Tracy, æt. 63, was an orderly in the ward adjoining the fever ward. Took his bed on the fourth day. A petechial eruption appeared over the abdomen and thorax on the seventh day; delirium slight at night. Pulse ranged from 112 to 118; was perfectly controlled by stimulants, the greatest amount of which was administered on the twelfth day, being 30 oz. Convalescence was established on the fifteenth day.

Michael Grady, æt. 13, mother and sister having just died of fever, was received into the hospital on the fifth day of the disease; delirium began on the eighth day. No eruption. Pulse ranged from 120 to 150, not responding in the least to stimulants. On the twelfth day he passed into a state of complete coma, and died on the thirteenth day. This boy had all the symptoms of typhus, except the eruption. On the ninth day he fell out of bed, contusing his eyes, from which the extravasation of blood was so extensive as to give the patient a hideous aspect. The largest quantity of stimulants was administered on the tenth day, being 24 oz.

John McDermott, aged 35, was admitted into the ward adjoining the fever ward, March 1st, for the treatment of gonorrhœa; his bed was near the door which opened into the hall next to the fever ward. On the 19th a petechial eruption appeared over the whole body, which in two days became dark-colored, and ceased to disappear under pressure; delirium was slight. Pulse ranged from 104 to 116. On the eleventh day he passed into a state of coma, and in twenty-four hours died. The greatest quantity of stimuli administered in any one day was 48 oz. No tympanitis nor diarrhœa. The examination of the urine by heat and nitric acid gave no evidences of albumen. Until coma supervened, there were no symptoms present in this case to indicate a fatal termination. The autopsy showed the Peyerian patches slightly elevated, presenting the "sham beard" appearances, their borders well defined; the solitary glands were also distinctly visible. The kidneys were greatly enlarged, and presented evidences of fatty degeneration, the left weighing 17 oz., and filled with blood.

Original Communications.

DIFFICULT OBSTETRICAL CASES.

By GEORGE T. ELLIOT, Jr., M.D.

PROFESSOR OF OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN IN THE BELLEVUE HOSPITAL MEDICAL COLLEGE—OBSTETRIC PHYSICIAN TO BELLEVUE HOSPITAL AND THE LYING-IN ASYLUM.

(*Continued from page 145—Sept. 13, 1862.*)

Case CI.—*Deformed Pelvis—Premature Labor—Unusual and marked difficulties in the induction.—Forceps by Dr. Taylor.—Vesico-Vaginal Fistula in a previous labor.*

In the *New York Journal of Medicine*, September, 1858, I have published in an article on Operative Midwifery—Case 21—the history of this patient's first labor, which I saw in consultation with Dr. H. S. Hewit, now staff-surgeon in the army, and Prof. Jno. T. Metcalfe. In that labor the child presented the breech and was delivered with the perforator and crotchet. We then made out the entire brim to be under size, with apparently $2\frac{3}{4}$ inches of antero-posterior diameter of brim and a sharp promontory. Subsequent examination has satisfied me that the conjugate diameter does not exceed three inches. Premature labor was strongly recommended to the patient after that delivery in the event of subsequent impregnation. This opinion was disregarded, and she sought other advice. After a very long and tedious labor at term, she gave birth without operative assistance to a second child, which was still-born. It is reported to me that great moulding of the head occurred in this labor, and a vesico-vaginal fistula resulting from the long continued pressure of the head, forced the patient once more to Dr. Hewit for relief, which was most kindly extended. The fistula required a number of operations, performed according to Sims's method, and was at last permanently cured.

Pregnant for a third time she applied to me, by Dr. Hewit's advice, for admission into Bellevue Hospital, where I determined to bring on the labor at about the end of the seventh month. Her general health was good, vagina perfectly sound, urine normal. As some puerperal fever just then showed itself I placed her in a separate ward with a special attendant, and requested Dr. Maus R. Vedder, then one of my house-physicians, to take charge of her, and carry out the treatment which I directed. Severe illness of one of my children interposed some delay in the management of the case, and forced me to leave town on the day of the delivery, which was accomplished by my colleague, Prof. I. E. Taylor, but the post-mortem of the child was directed by myself.

The following memoranda are those of my friend Dr. Vedder. It is necessary, however, to state, that *on Tuesday*, *Oct.* 15, 1861, at about the time fixed for induction of the labor, the patient was ascending a stairway when the membranes ruptured spontaneously, though not very great amount of liquor amnii escaped:

"On making a vaginal examination the os and cervix uteri were found soft and slightly dilated; while the vagina was plentifully lubricated with mucus. Labor-like pains occurred at irregular intervals until Wednesday morning.

"On Thursday, 17th, 11.30 P.M., Dr. Elliot ordered a warm uterine douche. The patient being placed on her back, the nates projecting over the edge of the bed, an ordinary gutta-percha enema syringe was used to inject the water. With two fingers introduced into the vagina I directed the orifice of the pipe directly into the interior of the cervix, and gradually injected about two gallons of warm water. This proceeding appeared to have the desired effect, as uterine contractions took place almost immediately, and the os uteri became softer and more expanded.

"On Friday morning (18th), I ascertained that the pains had occurred during the night at intervals, but had ceased entirely towards morning. An examination per vaginam being made, the os uteri was found almost entirely closed. The douche was repeated and followed by the same effect. The pains ceased during the afternoon, and in the evening a vaginal examination revealed that the os had returned to its former condition.

"Saturday 19th, 8.30 A.M.—The patient slept well, has no pains, and her bowels have moved. Repeated the injection. The os dilated to about the size of a dollar, but uterine contractions did not supervene.

"Monday 21st, 8.30 A.M.—Patient in good condition. Repeated the hot douche, which was again followed by the same results.

"Tuesday 22d, 8.30 A.M.—Patient has not slept well, is irritable, nervous, and hysterical, and complains of rigors.

"Wednesday 23d, 7.30 P.M.—Patient in good condition. Dr. Elliot found the os slightly dilated, and determined to introduce a large sized sponge tent, which was allowed to remain for twelve hours. On removing the tent, the next morning, the os was found fully dilated, though but few uterine contractions had occurred during the night. In short both the douche and the sponge tent dilated the cervix to such an extent as to prepare it fully for labor, but no pains supervening the relaxation would pass off and the os regain its normal condition. Galvanism was now suggested to excite uterine contractions, and was accordingly used. One pole was applied so as to pass along the spinal column, and the other was placed upon the abdomen and into the vagina alternately. This treatment was repeated several times during the day, occasionally producing uterine contractions, yet without having the desired effect.

"Friday 25th, 12 M.—Being disappointed with the efficacy of the uterine douche, sponge tent, galvanism, etc., Dr. Elliot prepared a part of an elastic male catheter (No 8) three and a half inches long, with a string attached to facilitate its removal. He then introduced this catheter anteriorly between the uterus and the membranes, and allowed it to remain for fifteen hours.

"Uterine contractions continued to occur at long intervals until Sunday, 27th, 5 P.M., when strong, frequent, and labor-like pains supervened: the os uteri was dilatable, and did not oppose any obstacle to the labor.

"At 10 P.M. the os was fully dilated, the head passed into the excavation.

"Dr. Taylor being sent for during the absence of Dr. Elliot, concluded, both from the deformity of the pelvis and the strong uterine contractions, as well as the non-advancement of the head, to apply the forceps, which was accordingly done.

"The child was delivered by gentle traction and without difficulty, while the placenta followed almost immediately. The child gasped a few times, and, by placing the ear to its chest, the heart was ascertained to be beating.

"Every effort was made to resuscitate the child, but in vain. Mother recovered perfectly."

Post-Mortem Appearances, 12 hours after delivery.—Male child; weight, six pounds two ounces; length, nineteen and a half inches; circumference of head, just above the ears, twelve inches. The child was apparently well formed and well nourished; nails distinct and well developed. Trace of forceps on right brow between anterior frontal angle and right ear; trace of the other blade posterior to left ear, about half an inch below the tip of mastoid process; head well ossified; frontal suture distinct to frontal superciliary ridge; left side depressed below the right to a marked extent; left fronto-parietal suture somewhat obscured at its lower part by œdema, but for the upper two-thirds the seat of an obvious depression, in breadth corresponding to that of the forefinger. This depression is formed by the frontal and parietal bones, but the parietal bone is depressed below the margin of the frontal. This parietal bone is also depressed at the parietal suture below the right parietal bone. The caput succedaneum is principally situated at the posterior and superior of the right parietal bone. Lips, blue black; some post-mortem discoloration of cheek and upper lip. On removing the scalp the relative situation of the bone described became more evident, and the depression of the anterior part of the left parietal bone is more evident. On removing the calvarium an amount of fluid blood escaped, from six drachms to an ounce. The brain presented an ordinary amount of vascularity, with no effusion. On removing and slicing the brain no clots nor extravasated blood could be detected. Weight of brain twelve ounces. Lungs have been inflated, crepitating under pressure. Other viscera appeared to be healthy. Bladder moderately distended with urine.

Remarks.—It thus appears that spontaneous rupture of membranes and escape of some liquor amnii, with labor pains supervening; dilatation of cervix uteri by douche, as far as generally necessary for induction of true labor pains; full dilatation of cervix by sponge tent, and galvanism, had all failed, when after leaving within the uterus (between that organ and the membranes) three inches and a half of a No. 8 elastic male catheter for *fifteen* hours, sluggish and reluctant uterine contractions gradually acquired force sufficient to drive the head through the contracted brim, when the labor was terminated by Dr. Taylor.

For a correct appreciation of the case it is important to understand that, after the douche, as after the sponge tent, the cervix uteri and vagina were sufficiently prepared for the labor, though the uterine contractions persistently refused to obey our summons, and press the head upon the cervix. The preparations were sufficient, but the labor would not be provoked. Descent of the head was not prevented by the deformity, but by the lack of true labor pains. How often do we see such cases in natural labor among multiparæ, where the os is widely open and pains supervene, while the finger readily touches the head, floating in the liquor amnii, and after all the pains may cease, and the patient's labor not occur for a fortnight. Those cases where there is a continuous drain of liquor amnii through the rent membranes continuing for weeks, without labor, come within the same category. I published a remarkable one in the *New York Medical Press*, for Nov. 4, 1859, where, with the approval of Dr. Barker, I induced labor after the waters had thus steadily dribbled for seven weeks. It is interesting to observe the effects of pressure by the projecting promontory on the fœtal head, and to see how the caput succedaneum, the depression, and marks of forceps all agree in determining the character of the presentation. In my experience, the difficulties signalized in this case are entirely exceptional, though as an exception it may serve to prove the rule that the induction of premature labor is an excessively simple and certain measure.

I regret that my memoranda of the date of the last menstrual period before impregnation are lost.

CASES IN MILITARY SURGERY.

By DEWITT C. PETERS, Asst.-Surg. U.S.A.,

SURG.-IN-CHARGE OF U.S.A. GEN. HOSP., STEUART'S MANSION, BALTIMORE, MD.

EXSECTIONS OF SHOULDER.—GUNSHOT WOUND OF STOMACH AND ABDOMEN.

I.—*Exsection of Head of Os Brachii.*—William H. Mantz, æt. 23, a private in the 1st Penn. Rifles, was transferred to this hospital from Frederick, Md., March 7, 1863. The patient states that at the battle of "South Mountain," Sept. 14, 1862, he was wounded. The musket-ball entered at the anterior surface of the shoulder-joint, shattered the head of the os humeri, passed backwards and downwards, and came out near the anterior edge of the scapula, about two inches below its spine. He describes the hæmorrhage from the posterior wound to have been free and continuous, even after the wounds were dressed. Owing to this fact, he says, the surgeon attending him thought of amputating. On the 18th of Sept. (four days after the injury was received) the patient was placed under the influence of chloroform, and the operation of exsection of the os humeri was performed. From appearances of the cicatrix I should judge the anterior wound was enlarged with a scalpel, by carrying it downwards in the direction of the long axis of the arm, to the extent of three and a half inches. The comminuted bone must have been removed, and the jagged extremity of the humerus excised to the extent of two inches. The man is unable to give any trustworthy account of the steps of the operation, as he was under the influence of the anæsthetic. He says, however, that the parts soon afterwards became greatly swollen, and were very painful. He was confined to his bed about six weeks, and then gradually he was allowed to sit up. During this period, he states, that his surgeon was fearful he would be obliged to amputate his limb, and that his life even was despaired of. The discharge from the wound commenced a few days succeeding the operation, and has continued uninterrupted to the present time, and has been of a thick yellowish color. On his admission into this hospital he was thoroughly examined. His general health is excellent, and he walks about with his accustomed vigor. The posterior wound (made by the ball) has entirely healed. At three points in the course of the anterior cicatrix there are three fistulous openings of a small size, from which he states three small pieces of necrosed bone have come away. The flow of pus from these openings is quite copious, but it is of a natural consistency and of good color. Exploring with the probe reveals the presence of more dead bone, which as it becomes detached will be carefully removed. By measurement it is ascertained that there is no difference in the length of the limbs. The shoulder, on the side of the operation, is flattened, and, with its projecting acromion process, and the depression clearly seen beneath, it bears resemblance to a dislocation of the head of the bone into the axilla. On comparing the shoulder with its fellow it is evident that the muscles of the joint (especially the deltoid) have atrophied. The patient has no voluntary power of motion at this shoulder-joint; but on taking hold of the arm, the surgeon can imitate to a certain extent the natural movements of the limb. A false joint is evidently forming, with every prospect of giving him a useful joint and limb. The hand, forearm, and elbow retain their wonted motions and strength. He can bring his hand to his mouth, rotate the radius on the ulna, grasp powerfully with his hand, and use his fingers equally as well as when the parts were sound. The patient at present carries his forearm in a sling, and has simple light dressings applied to the wound. No other treatment is required.

II.—*Excision of Shoulder, with good motions of arm and forearm.*—Francis Kant, æt. 21, states that he has been a soldier for twenty-two months. He belongs to Co. H, 9th N.Y. Vols. On the 7th March, 1863, he was transferred from Frederick, Md. to this hospital. The history of his case, as given by himself, is as follows:—At the battle of Antietam (Sept. 17, 1862) he was with his regiment, participating in the battle, when he was wounded in the left shoulder. The musket ball entered below the left coracoid process of the scapula, passed on, shattered the head of the corresponding os humeri, and came out at the back of the shoulder, just above the axilla. The hæmorrhage was not profuse, and without difficulty he walked to the rear, a distance of one mile and a half, where he was promptly attended by a surgeon. The second day after receiving the injury (the 19th of Sept.) he was placed under the influence of chloroform, and the operation of exsection of the shoulder-joint was performed by Surgeon Humphreys of his regiment. Judging from the cicatrix, the operation was commenced by the surgeon making a V incision over the insertion of the deltoid muscle (the concavity looking upward); the flap must have been dissected down to the comminuted bone, which was of course removed, and the head of the remaining jagged fragment was excised. The patient says, that since the date of the operation he has been informed that about two inches of the bone were thus removed. Following the operation he experienced no great amount of inflammation and swelling in the parts. This statement is fully verified by his adding that he was only confined to his bed three days, and that he then began to walk about. The wounds healed kindly in the course of three months, and the discharge was of good healthy pus. About three weeks since the upper edge of the anterior cicatrix reopened, and a rim of bone was taken away. By inspection it was found that it had been detached from the sawn extremity of the os humeri, and resembled fragments which are often thrown off in recent stumps. The fistulous opening is still unclosed, and gives every indication of the presence of additional dead bone, which, however, cannot be detected with the probe. On measurement from the most prominent portion of the acromion process of the left side to the tip of the olecranon process, and comparing this measurement with that of the opposite side, I find there is full two inches shortening of the injured arm.

The patient has considerable voluntary motion at the false joint which is rapidly forming. He can raise the arm from the body so as to expose the axilla to view, and can also move it forwards and backwards to a limited extent. The apposition of the parts is very favorable for the best of results, and in time he will no doubt have a useful joint and limb. The movements of the hands, the rotation of the radius on the ulna, and the strength of the forearm, remain intact. He uses the limb in feeding himself, and is highly pleased with having saved it. The wounds are at present dressed with simple dressings, and the patient is allowed to exercise in the open air freely.

These two cases beautifully illustrate the advance made in conservative surgery. The latter I am inclined to believe will prove the more successful of the two, but both are worthy of the skill of the operating surgeons. Private Kant informed me that a corporal of his regiment was wounded in the battle of Antietam in the same shoulder as he was, that bone to the extent of four inches was removed from the upper third of his arm, and that he entirely recovered, and is doing duty with his regiment.

III.—*Gunshot Wound of the Abdomen and Stomach.*—George H. Bowes, æt. 19, a private in the 8th Illinois Cavalry, was transferred from Frederick, Md., to this hospital, March 7th, 1863. The patient states that the day previous to the battle of South Mountain his regiment was in the advance, skirmishing with the enemy, when he became engaged in a hand to hand encounter with a rebel horseman. The man fired several shots at him with his revolver, one of which took effect in his abdomen. The ball entered the abdomen about two inches above the umbilicus, and one inch to the left of the linea alba, traversed backwards and slightly upwards, and made its exit just beneath the tenth rib, at a point that is about two and a half inches from the spinous process of its vertebra. The wound immediately placed him *hors du combat*, and he commenced to vomit blood, and it at the same time poured from his nostrils. The free hæmorrhage caused syncope, which temporarily arrested it; but at spells for the following seven days he had a series of these hæmorrhages. He further states that, after receiving the wound, he had bloody passages from his bowels, which gave him intense pain, and continued for about the same length of time. There was but a small amount of blood that escaped from the wounds. The surgeon who examined him on the field informed him that the ball had passed through his body. The injury was followed by acute inflammation, as he complains of having suffered much pain and tenderness in the whole abdomen, and says he had fever. He was confined to his bed undergoing active treatment for several weeks. Whenever he received fluids or solids into his stomach, he states that for a period of two months a part of the half digested material would escape from the anterior wound and soil the dressings. From his system's not receiving proper nutrition he became very weak and emaciated; but finally the wounds closed, and since then he has regained his health rapidly.

The healthy action of the primæ viæ is again fully established; but owing to contractions formed in the healing of the track of the wound he is bent forward, and cannot by any force straighten himself. The treatment at present is directed towards overcoming these contractions.

Cases of recovery from gunshot wounds of the abdomen are by no means uncommon; but recovery from wounds of the stomach (and there is every probability this comes under that category) and other abdominal viscera are exceptional to the general rule. While serving in New Mexico, I remember being called to a Mexican who was stabbed with a cheese-knife by a female. The anterior wound was similar in locality to the above case, and the posterior wound was in a direct line with the anterior. The force of the blow was so great as to drive the point of the knife into a bed on which the man was sleeping. The stomach chanced to be empty, and by introducing my finger into the wound I could not discover any wound of the stomach, yet the man had hæmatemesis and other symptoms which caused me to believe the stomach had been wounded. Several months afterwards I saw the man again, and found the wounds had healed under the simple attention given them by himself.

REPORT ON HOSPITAL GANGRENE.

By S. J. RADCLIFFE, M.D.,

ACTING ASSISTANT SURGEON U.S.A., U. S. GENERAL HOSPITAL ANNAPOLIS, MD.

Hospital gangrene, often a scourge to hospitals, has engaged the attention of, and has always been a subject of much interest to surgeons. At the present time, when there are so many opportunities offered of witnessing this devastating malady, they should not be allowed to go by unheeded. This, as well as other points in surgical pathology, should be thoroughly scrutinized, and every fact promptly noticed, in order that we may fill up any vacuum heretofore existing in its history, and form landmarks less uncertain or inaccurate than those formerly existing for our guidance. It has already arrested the attention of the Surgeon-General of the army, and he is giving it that thorough investigation which its importance merits. He has already sent to the hospital an experienced artist (with Surgeon Brinton, U.S.A.) and microscopist (Surgeon Woodward, U.S.A.), the one to sketch, and the other to examine minutely into its peculiar character. They have performed their work, and the result will doubtless be embodied in the Medical and Surgical History of the War.

I propose to report three cases, selected from those under my care in this hospital.

Case I.—John Dunkle, private Co. C, 11th Pa. R. C., a thin, delicate youth, aged nineteen years, wounded and taken prisoner at the battle of Fredericksburg, December 13th, 1862, arrived at this hospital per steamer New York, via Richmond, on the eleventh January, 1863.

His wound was produced by a fragment of shell, and situated in the posterior part of the lower third of the left thigh, involving the upper part of the popliteal space. On the day of admission the wound exhibited nothing strikingly peculiar or different from ordinary granulating shell wounds; and there was nothing to indicate any taint of the system.

His health was such as might have been expected from the circumstances attending imprisonment, bad diet, moving over rough roads, and inattention to dressing. Though he was much reduced and debilitated, yet the constitution did not seem to suffer in proportion to the extent of the injury. His pulse was a little feeble, and ranged from 80 to 90 beats per minute; his tongue was but slightly furred; his bowels and kidneys acted well, and the secretions, generally, were in a normal condition. He slept well, and seemed to be refreshed from the repose; his spirits were good, and the indications favorable. I applied simple dressings, frequently renewed, and put him on good diet.

On the morning of the twelfth a considerable erysipelatous blush circumscribed the whole wound, and the edges were thicker and somewhat everted.

In the afternoon of the twelfth I found the patient in a well marked rigor, spirits depressed and anxious, pulse feeble and quick, features pinched, and almost cadaveric in appearance. The wound had assumed a peculiar lividity, and an ill-defined line of sphacelation completely surrounded it, more especially at the edges, where the gangrene had actually commenced its ravages. By a little stimulation the chill passed off completely in an hour and a half, and was followed by a considerable febrile action.

The next day gangrene had enveloped the entire wound, and probably an inch of the surrounding tissues, which was one mass of black, putrid, highly offensive matter and uniform throughout. Beyond this inner black line, or outer line of the wound, I observed the same dull redness which had preceded the destruction of the parts adjacent to the wound, gradually fading into the healthier color of the skin, the precursor to further destruction. There was but little pain, and the patient gave no signs of much suffering. The constitutional symptoms remained about the same, with anorexia, thirst, transient flushes of heat over the surface of the body, bowels disposed to laxity, listless, inattentive, but anxious, and little disposed to sleep.

On the fourth day after the chill the sloughs began to separate, and large, black, fœtid masses dropped away, little by little, and in shreds, bringing with them the fascia, sheaths of the muscles, cutaneous nerves, and every tissue, cutaneous and subcutaneous, within its reach, except the arterial. The discharges were thin, ichorous, and very offensive. The constitutional symptoms were decidedly asthenic. The fever of a low form, pulse 100 to 125 per minute, and over, emaciation rapid, bowels moved twice to thrice daily; anxiety and torpidity continuing.

The edges commenced from this to extend in every direction, especially downwards in the popliteal space; the gangrene seeming to be guided by the outer and inner hamstring muscles, and upwards towards the pelvis, burrowing also deeply into the wound, between and around the muscles, and exposing their entire contour.

It went on in this way day by day until it had dissected out the muscles of the posterior part of the thigh, completely separating them, from above the convergence of the hamstring muscles or apex of the popliteal space to about two inches below the bend of the knee, or about the upper border of the popliteal muscles.

During the time of the separation of the slough it became extremely offensive from the putrescence and decomposition of the parts. It was a matter of considerable effort to remain in the room a single moment on account of the stench it emitted, and it contaminated the whole atmosphere within the room and the ward. The gases and discharges blackened lead, or adhesive plaster, or lead paint, and decomposed liq. potassæ, throwing down a heavy yellowish-colored precipitate. It was not until after the separation of the sloughs that the patient evinced any decided suffering from pain. Before he remained perfectly quiet, and suffered his wound to be dressed with a great deal of patience, even with escharotics. Now, he shrank at the very thought of the least manipulation, and begged piteously to be suffered to remain untouched; and when the dressings were applied would cry like a child, or moan as if in the deepest despair. This was the case when either cold water, dilute nitric acid, or nitric acid in the pure state, was used; one seemed to produce no more pain than another. About the first February the wound became nearly clean; the sphacelations were thrown off, the muscles became bare, the edges were sound, and the parts covered by a healthier discharge, and evidences were shown that a more normal action was about to take place. On the third February his fever increased, pulse 120 to 140; he became quite delirious, muttered and talked in his sleep, and was dozing or in a deep sleep most of the time; exhibited much prostration, had several involuntary evacuations, and all the symptoms had a decided typhoid tendency. After answering to an interrogation he would fall off into the same condition. By the sixth of February he had rallied considerably. His appetite improved, bowels were restrained, pulse less frequent, not over 90 per minute, talked more coherently, remained awake during the day, and slept pretty comfortably during the night, and the indications much more favorable. He remained in this condition a few days, when suppuration commenced to be established, and granulations were thrown out in several different points; and though there is much to be repaired, much surface to be covered, he is at this date (February 8th) greatly improved in every particular, and I have no reason to predict any other than a happy termination. The gangrene has been arrested, and there is now presented only a large granulating sore. The treatment in this case has consisted in the application in the first place of the nitric acid to the entire surface of the wound on the edges, and extending about half an inch on the sound skin, and afterwards of the constant saturation of the inner surface of the wound with acid. nit. dil. ʒ iss. vel ʒ ij. cum creasoto, gtt. x. vel gtt. xv. ad aquam Oj.; with the occasional use of liq. soda chlorinatæ, the internal exhibition of tr. ferri chlor. cum quinia sulph., with a generous and nutritious diet, milk punch, porter, etc. During the application of the weaker dressings, which was done much by syringing, necessarily during the treatment, I added tr. opii, gtt. xxx., to each quantity used, and when the pain was great, gave him solu. morph. sulph. officin., ʒ i. vel ʒ ij. previously to the dressing. Mistura cretæ cum catechu usually controlled the action of the bowels. The dressings were less frequent as the wound improved; a tent was used to keep the bedclothes from touching. The use of the scissors aided much in severing the dead parts. All bandages, cloths, or muslin and sponges used, were promptly destroyed, and all clothing and bed linen washed separate from the other hospital clothing or linen, and every means to destroy the accumulation of its contagious effects were employed.

(To be Continued.)

Reports of Hospitals.

BELLEVUE HOSPITAL.

LIGATURE OF THE COMMON CAROTID.

By DR. JAMES R. WOOD.

[Reported by WM. C. PRYER, M.D., House Surgeon.

THE patient, Robert Atkins, was a well known employee of Bellevue Hospital, having served as a fireman in the engineer's department of the institution for the past nine or ten years. He was a native of Ireland, forty years of age, and though to all appearance a man of good constitution, being a powerfully built, muscular fellow, he had for a long time been addicted to habits of intemperance, and was also known to have suffered from constitutional syphilis.

On the 25th of February, 1863, at about 10 A.M., the patient, while engaged at his ordinary occupation, was assaulted by one of the other inmates of the hospital, a man who had been employed for some time in various capacities in the institution, and who had always borne the character of a quiet, inoffensive lunatic. From some cause or other this man, on the morning in question, became violently enraged, and without any warning whatever suddenly dealt the patient a powerful blow upon the back with a coal shovel, knocking him down, and then beating him, while prostrate, about the head and face with the same weapon. The injured man was at once removed to one of the surgical wards, and his injuries examined. He presented a horrifying appearance, his face, especially on the right side, being covered with blood, besides being swollen and bruised. About one half of the lower lip was torn off, and hanging by its attached extremity. There was also a laceration of the left ear. Most of the teeth in both upper and lower jaws had been knocked out, and those remaining were so much loosened that it was necessary to remove a number of them, together with fragments of the alveoli. There was also a fracture of the lower jaw, a little to the right of the symphysis. The whole internal surface of the mouth was more or less lacerated, especially on the right side, and the end of the tongue on that side was bitten off. The patient was perfectly conscious, and answered several questions addressed him, although his injuries caused some difficulty in speaking. He stated that the blows on the back caused him no inconvenience. At the time of the reception of the injuries to the face, it is stated that the blood was forced from the mouth and nose of the patient at each blow, and a considerable quantity of blood was also found upon the pavement about the scene of the assault. At the time of his admission into the ward, however, the hæmorrhage was very slight, and the pulse was full and strong. The wounds were attended to immediately, the lacerations being sewed up, loose teeth removed, and the patient made as comfortable as circumstances would admit.

Two hours later (12 M.) Dr. James R. Wood saw the patient, and as there was some hæmorrhage from the mouth directed the house surgeon to fill the buccal cavity on the right side with picked lint. In doing this one of the arteries of the tongue was found bleeding, and was secured by a ligature. The actual cautery was also applied to the lacerated extremity of the tongue, and in this way the hæmorrhage from that organ was arrested. The flow of blood from the posterior and upper part of the mouth, however, still continued to increase in spite of the tampons of lint, and finally became so alarming that Dr. Sayre, who was in the building at the time, was asked to see the patient. Dr. Sayre advised pressure upon the carotid artery of the injured side, and upon its application it was found to control the hæmorrhage, so that with the aid of the coagula formed in the mouth very little blood was lost. This pressure was exercised by means of the application of the thumb over the vessel, forcing it back and compressing it against the vertebral column, and was kept up by several gentlemen of the house-staff, who relieved one another at intervals, from 2 P.M. until seven of the same evening, a period of five hours.

At about seven in the evening Dr. James R. Wood arrived, and proceeded at once to ligate the common carotid of the right side. The point chosen for the application of the ligature was above the omo-hyoid muscle, and in exposing the vessel some difficulty was experienced from the swollen condition of the parts rendering the wound exceedingly deep, and from the fact that all the surrounding tissues were so infiltrated with blood as to render it almost impossible to recognise the ordinary guides to the vessel. In performing the operation, the descendens noni was found lying over the sheath of the vessel, and carefully avoided, but neither the jugular vein nor the pneumogastric nerve was brought into view. After the vessel had been secured the external wound was closed by means of a suture and adhesive straps, and the clots removed from the patient's mouth, after which no more hæmorrhage took place. No anæsthetic was made use of, although the patient was fully conscious of all that was going on, and after the operation expressed himself as greatly improved. His pulse before the operation had become feeble from loss of blood, but after it had been performed no change was observed in the pnlse, and in fact the patient did not appear to suffer any shock from the operation whatever.

As a safeguard against any further hæmorrhage he was ordered to gargle the mouth with a strong solution of tannin (ʒ j. to aq. ℥ j.), and to take his nourishment in a fluid form, through a tube introduced far back in the mouth.

All of this he did without any apparent difficulty. At 11 P.M., as the patient was somewhat restless, ten drops of Magendie's sol. morph was ordered, after which he passed a tolerably comfortable night. On the following morning (Feb. 26th), however, it was evident that the patient's strength was failing, his pulse being now much more feeble and frequent (120 per min.). The supporting treatment was at once increased in force, and a moderate amount of stimulation added. At 10 A.M. the pulse had run up to 130 per minute, and an increase of the stimulation ordered. At 3 P.M. pulse more frequent, and at 4 P.M. the patient suddenly began to change for the worse; the mind, which up to this time had been clear, beginning to wander, and the respiration becoming irregular. At 6 P.M. patient entirely unconscious; pulse 160; respiration at long intervals, and gasping. At 9 P.M. patient died.

Sectio Cadaveris, Thirteen and a half Hours after Death.—The external marks of injury, laceration of lip and ear, together with fracture of the lower jaw, etc., were observed as before death. There were also cicatrices in both groins, and on the inside of both thighs. On the left leg there was an ulcer, extending, with interruptions, from the knee to the ankle. On opening the abdomen the liver was found to be the subject of fatty degeneration, being very large and light yellow in color; weight, 6 lbs. 2 oz. The gall-bladder was also very large, and filled with dark colored bile. The kidneys were very much diseased, having undergone fatty degeneration to such an extent that the cortical portion was scarcely appreciable, except on close examination. A portion of one of them was examined under the microscope, by Dr. Henry W. Cooke, of this Hospital, and a report of his observations is appended. The remaining organs of the abdomen, as well as those of the chest, were healthy. On dissecting up the scalp extensive extravasation of blood into the temporal muscle of the left side and the surrounding tissues was found. On removing the calvarium the dura mater was found slightly more congested than usual, but beyond this nothing abnormal. Some extravasated blood was found under the arachnoid, on the left side, corresponding in position to the extravasation already found in the temporal muscle of that side. There was also some subarachnoid serous effusion, and the latter ventricles were slightly distended by an effusion of the same character. The ligated vessel was then carefully dissected out from its bifurcation above, down to the innominata below, and the whole, together with a part of the arch of the aorta, removed. A coagulum was found to have formed on both the proximal and distal sides of the ligature, but as yet these had not acquired any firmness. Owing to the opposition of the friends of the deceased no dissection of the face was had, and for this reason it is impossible to state the particular vessel from which the hæmorrhage had come. It is supposed, however, from the facts that the blood was seen, during life, to come from the upper and back part of the mouth, and that its flow was arrested by ligation of the carotid of the corresponding side, that the internal maxillary, or some of its branches, was the vessel or vessels injured.

Microscopical Appearance of Kidney.—The tubuli uriniferi in their straight portion congested, their coats the seat of fatty degeneration, the epithelial lining in many instances absent, and in others detached and free in the tubes occluding them, and in all cases granular and disorganized. The corpora malpighiæ in many cases entirely absent, from what appeared to be fatty degeneration in some situations, and from fibrous degeneration in other portions. In addition to this there was a large amount of intervesicular exudation. In short, the kidneys appeared, both to the unaided sight and with the microscope, gravely diseased.

In reporting the case it may not be improper to call attention to the fact, that the operation was entirely successful in fulfilling the indication for which it was undertaken, that is, in arresting the hæmorrhage from the mouth.

American Medical Times.

SATURDAY, APRIL 4, 1863.

SICKNESS AND MORTALITY OF THE U. S. ARMY.

Every one who has ever been interested in sanitary science will look forward with eagerness to the official reports of the sickness and mortality of the vast armies of the United States. The only data which have yet been published upon which an opinion can be based are embraced in the report of Mr. Elliott, Actuary to the Sanitary Commission, and the report of Assistant Surgeon Woodward, to the Surgeon-General, on another page. The latter report gives definite returns for each disease for the year ending June 30, 1862. Mr. Elliott's calculations are more general, but not the less valuable, while the comparisons which he has instituted are of great interest.

The general mortality of the army has been, according to Mr. Elliott, at the annual rate of 53.2 per 1,000 numerical strength, of which 44.6 were from disease and accident, and 8.6 from wounds received in action. Assist. Surgeon Woodward gives the mortality for 1862 exclusive of wounds at 65 per 1,000. These statistics in either case compare most favorably with those of the British army. During war from 1803 to 1812 its annual death rate was 80 per 1,000, 71 per 1,000 being from disease and accident, and 9 from wounds in action. In the Peninsular war 1811–14 the annual death rate was 165 per 1,000, of which 113 were from disease and accident, and 52 from wounds received in action. When, however, we contrast the mortality of our army with that of the English during the Crimean war its mortality becomes insignificant. The annual death rate of the British army was fixed at the frightful figure of 232 per 1,000, or about four and one third times that of our volunteer army. The mortality of our army during the present war compares most favorably with its mortality during the Mexican war. The death rate then was 118 per 1000 per annum, or more than double the rate of the war of the rebellion during its first year. It is apparent that the general mortality of the U. S. army forces is comparatively very small. The ratio of mortality from diseases and from wounds is, as usual, markedly in favor of the former. The mortality from diseases was five-sixths for the men, and two-thirds for the officers. In the Crimean war seven-eighths of the mortality of the British troops were from diseases. The difference in the causes of death among officers and privates is noticeable. The liability of the private to die of disease is double that of the officer, while his liability to die of wounds is only one-third as great.

Other deductions are made in Mr. Elliott's interesting report. The mortality by seasons is exhibited as follows:—For the summer months 21 per 1,000, for the fall months 36 per 1,000, and for the winter months 70 per 1,000. This apparent gradual increase of the mortality is attributed in part to the greater completeness of the returns as the war progressed. The mortality by localities where recruited and by rank is also noted as follows:—The annual death-rate of the troops recruited in the New England States was 36 per 1,000 strength, of which 31 was from disease and accident, and 5 from wounds in action; the rate for Commissioned Officers being sixteen, and for Enlisted Men 37 per 1,000. For the Middle State Group (including, with the Middle States proper, the States of Delaware, Maryland, and Virginia) the annual death-rate was 30 per 1,000 strength, of which 27 were from disease, etc., and 3 from wounds in action; the rate for Commissioned Officers being 22 per 1,000, and for Enlisted men 30 per 1,000. The annual death rate for the New England and Middle Groups combined was 32 per 1,000 strength, of which 28 was from disease and accident, and 4 from wounds in action; the rate for Commissioned Officers being 21, and for Enlisted Men 32 per 1,000. The rate for the Western Group (including, with the Western States proper, the States of the Southwest) was 95 per 1,000 per annum, of which 77 were from disease and accident, and 18 from wounds in action; the rate for Commissioned Officers being 59, and for Enlisted Men 96 per 1,000. The mortality of the armies recruited at the West (and which as a rule operate at the West) is almost precisely three times that of the troops recruited in the Middle and New England States (and which as a rule serve with the armies at the East), the Western rate from wounds received in action being five times, and that from disease and accident a little less than three times as great as the corresponding Eastern rates.

The sickness rates in the Eastern and Western Departments present the same contrasts. Mr. Elliott remarks: "There is reason for the belief that the excess of the rates of sickness and mortality in our Western armies over those in the East, is due, in no small degree, not merely to the greater activity of the former in the field, to over-exertion and exposure, as the result of severe and long continued marches, and to stubborn and deadly encounters with the enemy in arms, but also to badly chosen camp sites, to imperfect and neglected drainage (the nature of the surface and soil not unfrequently being such that suitable camp sites, free from malaria, and affording ample facilities for drainage, could not be found if sought); to the too crowded condition of hospitals; to less of variety in food (soft bread and desiccated vegetables in very many Western regiments being seldom or never had), and to less of skill and care in its preparation; to water of impure quality and sometimes of insufficient quantity; to the greater disposition on the part of the soldiers to neglect appliances for personal comfort; and to the greater neglect of, or a lack of means for enforcing cleanliness of person and camp."

The valuable statistical tables of Asst.-Surgeon Woodward will interest the student of military hygiene. The zymotic diseases, as might have been anticipated, greatly predominate. We have not space to dwell on the interesting questions which these tables suggest. Large as is the aggregate of sickness and mortality in our army, it is consoling to be assured that, so far from being excessive, it is less than that of European armies.

THE WEEK.

We are glad to notice the interest with which the approaching meeting of the American Medical Association is regarded by the profession. Local societies are appointing their delegates, and from present appearances the representation will be large. There is one class of members who will prove delinquents, if they do not immediately commence the necessary preparation. We refer to those appointed at the last meeting, to present reports. It is to be hoped that every one honored with the Chairmanship of a Committee will perform his duty.

The hospital car, to which we have alluded, has been completed, and has made several trips between Washington and New York, carrying a large number of sick and wounded. It has proved a most decided success. The severest cases of compound fracture have been transported without the slightest inconvenience. These cars, of which several are being built, will provide the means of conveying the sick and freshly wounded soldiers to hospitals far removed from the scene of battle, and to the more immediate neighborhood of their homes.

We have opposed the present Lunacy Commission Bill because its provisions are so limited as to accomplish few, if, indeed, any, of the objects originally contemplated by the friends of the measure. The occasion seems auspicious for the enactment of a law, complete in most of its details. It has the support of the Governor, and many of the most prominent men of the State; and has, after several years of discussion, acquired a powerful moral force. We are quite willing, with Dr. Chapin, to advocate a less complete bill than that of 1861, but we would not be willing to emasculate it, as has been done, for the purpose of removing all opposition.

Reviews.

Recherches sur la Syphilis, Supported by Statistics drawn from the Archives of the Hospitals of Christiania, by Professor W. Boeck,, of the Faculty of Medicine of that City. Work published in French, by order and at the expense of the Norwegian Government, pp. 510.

This book, it would seem, has weight enough to settle many of the wranglings about Syphilis and its treatment, for words are more or less convincing when sustained by figures such as are here given. The statistics of treatment are very extensive, and evince an air of exactitude and comprehensiveness which fully warrants the following rather copious extracts. The author's endeavor has been to expose the comparative results of the divers remedies and modes of application; and first will be noticed that which relates to primary accidents under mercurials.

By Hahnemann's soluble mercury have been treated 348 males and 101 females for the *first* primary affection; average time of treatment, males 58 days, females 68 days. Total number of individuals treated by same remedy for *first* primary attack is therefore 449, rendering the average time, disregarding sex, 60 days. For *second* primary affection by the same remedy 24 individuals have been treated 1247 days, which gives mean time of 51 days. Total number of primary cases treated by Hahnemann's sol. mercury is consequently 473; average time of treatment 59 days.

Have been treated by calomel for *first* primary affection 385 males, mean time 59 days; and 81 females, mean time 71 days. Total number by calomel for *first* primary 466; mean time of treatment 61 days. Have been treated by calomel for *second* primary attack 33 cases; mean time 53 days. Total number of primary affections treated by calomel 499; mean time of treatment 60 days.

Have been treated by prot. iod. of mercury for *first* primary, 46 males, mean time 60 days; and 20 females, mean time 85 days. Total number of individuals treated for *first* primary affection by prot. iod. of mercury 66; mean time of treatment 66 days. For *second* primary attack 10 have been treated by same remedy; mean time 54 days. Total number of primary cases treated by prot. iod. of mercury 76; mean time of treatment 66 days.

La cure de Dzondi has been used in 19 cases of *first* primary, necessitating 329 days of treatment; mean time 69 days. Same remedy applied to eight individuals for *second* primary needed 480 days; mean time therefore 60 days. Total number of primary affections treated *par la cure de Dzondi*, 27; mean time of treatment 67 days.

It will be seen from this *exposé* that in every instance where mercury has been employed, against the *second* primary affection, the average time of treatment has been much shorter than when used for *first* primary, and therefore it may be taken as a rule that, where mercury has been adopted in treating the *first* primary affection, the time of treatment for the *second* primary affection when equally treated by mercury will be shorter. Now, let us see how the disease can be managed without mercury.

149 cases under sulphate of magnesia, jointly with some external remedies for *first* primary, have given 49 days as mean time of treatment. Have been treated by the same agent 26 cases; mean time 31 days. Total number of cases treated by sulph. magnes. 175; average duration of treatment 35 days.

Iodide of potassium for *first* primary has been used in 20 cases; mean time 74 days. The same remedy for a second primary attack has been employed in two individuals only; mean time 28 days. Total number of primary cases subjected to iodide of potash, 22; average duration of treatment 42 days.

344 have been confined solely to the application of external remedies, giving 42 days as the average time. 72 cases treated in this way for *second* primary; mean time 31 days. Whole number of primary affections submitted to external remedies, 416; mean time of treatment 40 days.

But M. Boeck has not been bound in his industrious research to merely computing the respective durations of treatments. Another question of high importance impressed him, which was to know if any treatment whatever is capable of preventing constitutional syphilis, and if so, what is it? Here following are the statistics on this point:

Among 1008 treated by mercury, 242 became affected constitutionally (24 per cent.); in 522 treated without mercury, 77 affected, *i.e.* 14 per cent had secondary syphilis.

The different mercurial preparations have given in this regard results as follows:—Of 449 under Hahnemann's soluble mercury, 112 had secondary (24 p. c.); 95 in 466 treated by calomel (20 p. c.); 25 in 66 of those put on hyd. prot. iod. (37 p. c.); 6 in 19 by *la cure de Dzondi* (31 p. c.); 18 in 149 by administration of sulph. magnes. (12 p. c.); 4 in 20 under iod. potass. (20 p. c); 55 in 344 treated solely by external means. (16 p.c.?)

It is to be inferred then from this statistical synopsis that mercury, far from doing good in primary syphilis, has been positively baneful. The time of treatment under its agency has been shown to be longer, and the influx of secondary symptoms by no means prevented, checked, or modified.

The author's views on chancre will be given in a future notice. CYGNET.

THE MEDICAL STUDENT'S VADE MECUM. A Compendium of Anatomy, Physiology, Chemistry, Poisons, Materia Medica, Pharmacy, Surgery, Obstetrics, Practice of Medicine, Diseases of the Skin, etc. By GEORGE MENDENHALL, M.D., Prof. of Obstetrics in the Medical College of Ohio, etc. Seventh Edition, revised and greatly enlarged, with Two Hundred and Twenty-four Illustrations. Philadelphia: Lindsay & Blakiston, 1863. Pp. 692.

THIS is one of the most popular of those small works designed to furnish, in a single small volume, an Epitome of all the subjects to which the student has to devote his attention. This edition is more worthy of patronage than its predecessors.

Correspondence.

THE LUNACY COMMISSION BILL.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—The zeal with which you have uniformly advocated, in your columns, the interests of that much neglected class, the insane poor, entitles you to receive the gratitude of the profession and all friends of humanity. You will concede the means by which their condition is sought to be improved are various. Any measure, however, from which any practicable, good result promises to arise, should receive a cordial support. We endeavored to show on a former occasion that legislation of a radical character was necessary to accomplish the end devised—such legislation as would insure for every insane person an intelligent recognition of the nature of his disease, as well as proper means for his relief. We know very well this cannot be hoped for in the present apathetic condition of the public mind. An important step in the right direction is the creation of a Commission of Lunacy, through which instrumentality this whole subject may be presented in a comprehensive and official manner. We should be very sorry to see the Bill now pending before the Legislature jeopardized through any disposition to amend by ingrafting upon it, as you have suggested, the features of the Bill of 1861.

The Bill of 1861, while it contained many excellent provisions which you have enumerated, embraced provisions that were objectionable, and which were calculated to arouse opposition, if not to defeat it. For instance, it conflicted with the established manner of procedure in criminal cases, where the question of the sanity or insanity of the accused party occurred, by doing away with a trial before a jury, and constituting the commissioner virtually a judge and juror in the case. This aroused the jealousy and opposition of the legal profession. Again, it threw unnecessary obstacles in the way to admission of patients to *private* asylums, as wall as discriminated against them, by requiring evidence of insanity satisfactory to the county judge where the patient resided, as a requisite to admission. Patients from other States and Canada would thus be put to great inconvenience in presenting themselves for admission, in ignorance of the local law. Proceedings for admission to all hospitals should be simple and uniform, especially as the Commissioner might be intrusted with power to rectify abuses if they occur. Why should a patient laboring under maniacal delirium be precluded from proper treatment until proceedings in open court have established the fact, any more than a practitioner out of a hospital be prohibited by law from taking charge of a case of dysentery until the county judge is satisfied of the fact by proceedings "in open court, or at chambers?"

The Bill in its present form has not, so far, met with any opposition, and, under the circumstances, meets the views of the committee of the State Medical Society. It contains provisions, which, in the hands of a competent person, will enable the Commissioner to accomplish all, in one year, that can be reached by means of any bill. Looking upon it as a means to an end, on the principle that "half a loaf is better than no bread," we hope the Bill will pass, fully believing that no bill possesses in itself inherent power, but that it may be instrumental, in the hands of an enterprising and competent officer, in accomplishing all that the friends of this measure desire.

Yours, etc.,

JNO. B. CHAPIN, M.D.,

BRIGHAM HALL, CANANDAIGUA, March 14, 1863.

REMARKABLE INSTANCE OF THE
GLANCING OF A MINIE BALL.

[To the Editor of the American Medical Times.]

Sir—The accompanying case appears to me to be one of unusual interest. If it deserves your attention, you are at liberty to publish it.

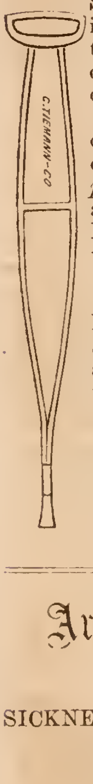
Geo. Fowler, Co. F. 50th N. Y., was admitted into hospital, December 19th, with a gunshot wound received at Fredericksburg, December 13th, the ball entering just behind the left great trochanter, but not emerging. A probe following the track of the ball made an *obtuse* angle of about 115° with the shaft of femur. A small fragment of bone was found splintered from the great trochanter and extracted.

Jan. 3d.—I discovered tenderness and a point of hardness at upper border of left nates, which was suspected to be the ball, but from its great depth under the muscles, it was impossible to determine. I conferred with two surgeons, who dissented, on the ground that the ball, if there, *must have glanced at an acute angle.* Still, not being able to account for the tender and indurated spot, and the operation being unattended with danger, I cut down two inches through the muscles, and came upon the ball, the *curvature* of which corroborated the supposition as to its direction.

Yours, etc.,
Geo. F. French, M.D., A. A. Surg. U.S.A.

IMPROVEMENT IN CRUTCHES.

[To the Editor of the American Medical Times.]



Some weeks ago, at Bellevue Hospital, I came in contact with an officer, who had lost a leg in the service of his country, and was using a pair of crutches that seemed to me admirable. He had devised them himself.

The improvement consists in cushioning the arm of the crutch with *Hollow Rubber Tubing*—say 1½ or 2 inches in diameter. It seems to me to be *the perfection* of a crutch. Having been obliged from a severe injury to use crutches for some months, I may without vanity claim to be a judge of them.

At my suggestion Mr. Solmann, the partner of Mr. Tiemann, 63 Chatham street, to whom the Profession are indebted for so many ingenious appliances, has made a number of these crutches, and I can cordially and conscientiously recommend them to the trial of the profession and the public. They are *not* a *patented* article.

Yours etc.,
T. Childs, M.D.

P.S.—I append a drawing of the improved crutch.

45 East 28th Street.

Army Medical Intelligence.

REPORT ON THE
SICKNESS AND MORTALITY IN THE U. S. ARMY,
FOR THE YEAR ENDING JUNE 30, 1862.

Surgeon-General's Office,
Washington City, D.C., February 25, 1863.

Brig. Gen. Wm. A. Hammond,
Surgeon-General, U.S.A.

General:—In reply to your communication of yesterday, I have the honor to inform you that the work of preparing the Medical History of the Rebellion is steadily progressing. Besides the statistical reports, descriptions and plans of the general hospitals of the country, with a large number of reports and memoirs on various subjects connected with the medical history of the several armies, have been collected and are being digested. I herewith transmit the statistical summary of the diseases and deaths (not including the killed in battle) of the Armies of the United States for the fiscal year terminating June 30th, 1862. The Medical History, from the outbreak of the rebellion to the same date, will, it is believed, be completed in time to lay before Congress at the opening of the next session. The figures which I now present are far from representing completely the whole number of cases of disease and all the deaths occurring during the year, the incompleteness arising partly from the fact that the regimental surgeons were at first very negligent about making the reports required by regulations. Other elements of incompleteness, however, must exist in the case of every great army in time of war, especially during active campaigns covering great regions of country. So notably has this been the case heretofore that no great army, actively engaged in hostile operations, has ever published statistical tables of even approximate accuracy.

The best and most complete tables of this sort, ever published, were probably those of the British Army during the Crimean war. Yet, although the well disciplined and organized body of regular troops sent to the Crimea was very small compared with the vast forces which have been put into the field during the present struggle, and although its operations were not characterized by the frequent and rapid movements which have been necessitated by the great extent of the regions over which our own operations have extended, there will be found many deficiencies even in these reports. The reports of the French Army, engaged in the same war, are still more incomplete.

In our own country during the Mexican war the reports received at the Surgeon-General's office were so incomplete, and contained such numerous sources of error, that the attempt to compile the usual statistical reports of disease from the records of the bureau was reluctantly abandoned.

The difficulties which interfere with the collection of medical statistics from armies actually engaged in warfare, and especially under circumstances such as those in which our armies are at present involved, can readily be appreciated.

Aside from the fact that many of the surgeons first appointed were some time in mastering the details of their official duties, and frequently did not begin to keep the records and make the reports required by regulations until they had been some little time in service, many deficiencies have arisen from the capture of reports by the enemy, from the want of a due supply of books, blanks, and often even of paper in the case of regiments making rapid movements with little transportation; and very frequently, especially after battles, and in the case of great general hospitals suddenly established, from the surgical force being so small in proportion to the gigantic tasks imposed upon it, that the time of medical officers was too fully occupied by the practical task of providing for the most necessary wants of the sick and wounded, to allow them to keep the records needed to serve as a basis for the required reports.

Notwithstanding the deficiencies arising in this manner, it is believed that, so far as they go, the statistics compiled amidst so many difficulties have very great value, and that the deductions drawn from the numerous reports received can, with safety, be regarded as approximating the results which would have been attained had returns been duly made by all the troops in the field. For, as the report of each regiment and detachment is accompanied by a record of its mean strength, the mean strength of that portion of the army represented by the reports, is readily ascertained, and serves for the calculation of ratios, which can be applied with probable accuracy to the whole force.

The following statistical summary is compiled from reports which represent an annual mean strength of 281,660 men, the largest force represented in any one month being in April, 1862, in which the reports are from a mean strength of 398,626 men.

From this annual mean strength of 281,660 men, 880,081 cases of disease and 18,434 deaths are reported, exclusive of those killed in battle, being in the ratio of 3,124 cases and 65 deaths per 1,000 of mean strength. At first sight the number of cases will appear to many prodigious, and the number of deaths disproportionately small. The figures will, however, be perhaps better appreciated by comparing them with the results obtained by Medical Inspector Coolidge, U.S.A., in his published statistical reports of the United States armies for eighteen years, from 1840 to 1859 inclusive, but excluding the years 1847 and 1818, for which statistics were not compiled, on account of the confusion of the Mexican war. During this period the average annual ratio was 2.886 cases and 26 deaths per 1,000 of mean strength. It will thus be perceived, that during the exposures of the present struggle the total proportional number of cases of disease has been considerably increased, but that the increased gravity of these disorders, as indicated by the greater mortality, is much more considerable; the ratio of sickness per thousand of mean strength having increased 11 per cent., while the ratio of mortality per thousand of mean strength has increased 250 per cent.

An examination of the appended statistical table shows that the prominent diseases from which our troops suffered have been *camp fevers*, of which, under the several designations of typhus, typhoid, common continued, and remittent fevers, 74,770 cases and 5,116 deaths have been reported; *intermittent fevers*, of which 73,002 cases and 425 deaths are recorded under the heads of quotidian, tertian, quartan, and congestive fevers; *diarrhœa* and *dysentery*, 215,632 cases and 1,128 deaths; *catarrhal affections* of the respiratory organs, 125,290 cases and 138 deaths, reported under the several heads of catarrhus, catarrhus epidemicus, bronchitis acuta, and bronchitis chronica, to which group may be added 11,067 cases and 2,015 deaths from pneumonia and rheumatic affections, of which 44,782 cases and 48 deaths are reported under the heads of rheumatismus acutus, rheumatismus chronicus, and lumbago.

A large number of cases of *measles* are also reported (21,671), and it is probable that the real proportion of cases was much greater, as very many regiments are known to have suffered from the affection prior to being mustered into the service of the United States, in which case, as a general rule, no statistical report would be received at this office.

It would be premature at the present time to make any detailed remarks with regard to the peculiarities presented by these affections. It may, however, be interesting to state in a general way, that all these diseases, but especially the camp fevers, the diarrhœa, and the dysentery, have been much less fatal than similar diseases have proved to the great European armies in time of war. The same is true of the total mortality from all causes exclusive of the killed in action. It is doubted whether the armies of any European nation actually engaged in warfare, have ever presented so small a proportionate mortality as we have been favored with.

One important cause of these fortunate results is to be found in the comparative immunity from scurvy which our troops have enjoyed. It will be perceived that only 1,322 cases and eight deaths from scurvy have been reported, being in the proportion of but five cases per thousand of mean strength, and but one death to thirty-five thousand of mean strength.

It is true that communications received from many medical officers would induce a belief in the existence of a scorbutic disposition influencing the prevailing type of disease to a much greater extent than these figures would indicate, yet the fact that so small a number of cases have presented the symptoms of scurvy in a sufficiently marked manner to justify the surgeons in calling them by that name, is believed to be a favorable circumstance without parallel in the history of armies.

In estimating the actual mortality produced by the war, however, it is only fair to add, to these satisfactory considerations, the statement, that the liberal freedom with which discharges have been granted to sick and disabled soldiers has, no doubt, sent home many incurable patients who would, in other armies, have swelled the mortality rates. The number of deaths which have occurred among this class of cases, subsequently to their discharge from the service of the United States, cannot, of course, be ascertained from any official records, and it is doubted whether it can ever be satisfactorily approximated.

I have the honor to be, very respectfully,
Your obedient servant,
J. J. Woodward, *Assist.-Surg. U.S.A.*

	Total by each disease.	
	Cases.	Died.
CLASS 1.—Zymotici.		
Order 1.—*Miasmatic Diseases.*		
Febris typhus	894	176
Febris typhus icterodes		
Febris typhoides	[illegible]	5406
Febris continua communis	11827	176
Febris remittens	[illegible]	858
Febris intermittens quotidiana	[illegible]	88
Febris intermittens tertiana	26783	32
Febris intermittens quartana	[illegible]	8
Febris intermittens congestiva	[illegible]	[illegible]
Diarrhœa acuta	[illegible]	[illegible]
Diarrhœa chronica	[illegible]	468
Dysenteria acuta	[illegible]	[illegible]
Dysenteria chronica	[illegible]	111
Cholera Asiatica		
Erysipelas	[illegible]	[illegible]
Variola	[illegible]	[illegible]
Varioloides	[illegible]	7
Rubeola	21671	[illegible]
Scarlatina	[illegible]	10
Parotitis	[illegible]	6
Catarrhus epidemicus	[illegible]	5
Debilitas	[illegible]	[illegible]
Other diseases of this order	[illegible]	82
Totals	[illegible]	[illegible]
Order 2.—*Enthetic Diseases.*		
Syphilis primitiva	[illegible]	1
Syphilis consecutiva	[illegible]	11
Gonorrhœa	[illegible]	
Orchitis	[illegible]	
Strictura urethræ	405	
Morsus serpentis	[illegible]	1
Other diseases of this order	2	
Totals	[illegible]	[illegible]
Order 3.—*Dietic Diseases.*		
Scorbutus	[illegible]	8
Delirium tremens	656	53
Ebrietas	978	19
Other diseases of this order		
Totals	2956	80
Totals of Class 1	[illegible]	8984
Ratio per 1000 of Mean Strength	1648.53	31.89
CLASS 2.—Cachectici.		
Order 1.—*Diathetic Diseases.*		
Podagra	96	
Rheumatismus acutus	[illegible]	27
Rheumatismus chronicus	[illegible]	19
Lumbago	[illegible]	2
Anæmia	[illegible]	13
Anasarca	758	29
Cachexia	412	1
Scirrhus	83	5
Tumores	[illegible]	
Other diseases of this order	1602	2
Totals	[illegible]	[illegible]
Order 2.—*Tubercular Diseases.*		
Phthisis pulmonalis	2511	517
Scrofula	[illegible]	9
Other diseases of this order		
Totals	3139	526
Totals of Class 2	52500	624
Ratio per 1000 of Mean Strength	18639	2.21
CLASS 3.—Parasitici.		
Vermes	1057	
Ratio per 1000 of Mean Strength	8.75	
CLASS 4.—Monorganici.		
Order 1.—*Diseases of the Nervous System.*		
Apoplexia	196	121
Cephalalgia	7129	1
Cerebritis	153	90
Chorea	78	2
Epilepsia	1199	87
Ictus solis	422	17
Irritatio spinalis	561	7
Mania	228	8
Melancholia	267	8
Meningitis	170	103
Nostalgia	572	1
Neuralgia	7552	1
Odontalgia	7512	
Paralysis	832	20
Tetanus	25	21
Other diseases of this order	893	85
Totals	27289	467
Order 2.—*Diseases of the Eye.*		
Amaurosis	147	
Cataracta	71	
Iritis	282	
Nyctalopia	109	
Ophthalmia	8571	1
Retinitis	132	
Other diseases of this order	1069	
Totals	10381	1
Order 3.—*Diseases of the Ear.*		
Otalgia	1773	
Otitis	1461	1
Otorrhœa	1410	1
Surditas	263	
Other diseases of this order	173	1
Totals	5080	8
Order 4.—*Diseases of the Organs of Circulation.*		
Aneurisma	85	6
Angina pectoris	284	5
Carditis	150	21
Endocarditis	109	16
Pericarditis	225	37

	Total by each disease.	
	Cases.	Died.
Phlebitis	733	
Varicocele	988	
Varix	778	1
Other diseases of this disorder	504	87
Totals	3096	126
ORDER 5.—*Diseases of the Respiratory Organs.*		
Asthma	1168	11
Bronchitis acuta	26181	98
Bronchitis chronica	3893	29
Catarrhus	83888	6
Epistaxis	405	4
Hæmoptysis	1054	18
Hydrothorax	23	5
Laryngitis	2598	82
Pleuritis	5079	72
Pneumonia	11067	2015
Other diseases of this order	5037	209
Totals	140393	2499
ORDER 6.—*Diseases of the Digestive Organs.*		
Ascites	150	17
Cholera morbus	4314	33
Colica	11383	11
Constipatio	27205	4
Dyspepsia	6146	1
Enteritis	1154	90
Gastritis	2556	33
Fistula	375	
Hæmatemesis	207	4
Hæmorrhois	5764	8
Hepatitis acuta	2093	19
Hepatitis chronica	1138	19
Hernia	3821	6
Icterus	10965	40
Prolapsus ani	344	
Peritonitis	425	67
Splenitis	282	2
Tonsilitis	11464	9
Other diseases of this order	7210	43
Totals	96996	401
ORDER 7.—*Diseases of the Urinary and Genital Organs.*		
Calculus	93	
Cystitis	401	5
Diabetes	125	2
Enuresis	170	1
Ischuria et Dysuria	892	1
Nephritis	933	10
Hæmatocele		
Hydrocele	192	
Sarcocele	127	
Ulcus penis non syphliticum	336	
Other diseases of this order	879	10
Totals	4148	29
ORDER 8.—*Diseases of the Bones and Joints.*		
Anchylosis	125	
Exostosis	111	
Hydrarthrus	111	1
Necrosis	208	
Other diseases of this order		
Totals	555	1
ORDER 9.—*Diseases of the Integumentary System.*		
Abscessus	5296	6
Anthrax	1191	1
Paronychia	1298	
Phlegmon	3540	
Morbi cutis	5180	2
Ulcus	4103	5
Other diseases of this order	1530	
Totals	22138	14
TOTALS OF CLASS 4	359274	3607
RATIO PER 1000 OF MEAN STRENGTH	1275.55	12.80
CLASS 5.—THANATICI.		
Ambustio	1002	21
Concussio cerebri	144	18
Compressio cerebri	60	17
Contusio	6903	23
Fractura	1244	49
Gelatio	190	4
Luxatio	638	
Sub luxatio	3153	1
Vulnus incisum	4064	16
Vulnus contusum vel laceratum	5261	111
Vulnus punctum	1393	27
Vulnus sclopeticum	17556	4435
Toxicum	293	19
Suicidium	44	44
Other diseases of this class	3073	92
Totals	45028	4858

CHANGES, ORDERS, &c.

SPECIAL ORDERS, No. 121.

WAR DEPARTMENT, ADJ. GEN'L'S OFFICE.
WASHINGTON, March 14, 1863.

7. The following assignment is made of Medical Officers:

Surgeon William Dickinson, U.S.V., now on duty with General F. H. Warren's Brigade at Houston, Mo., will report in person without delay to Assistant Surgeon-General R. C. Wood, U.S.A., at St. Louis, Mo., for duty in charge of the Eye and Ear Infirmary in that city.

Surgeon C. C. Cox, U.S.V., to duty as Medical Purveyor at Baltimore, Md.

Assistant Surgeon William F. Breakey, 16th Michigan Vols., now on duty in the Army of the Potomac, to report to Surgeon R. O. Abbott, U.SA., Medical Director. for duty in Washington city, D. C.

Assistant Surgeon S. H. French, 109th New York Vols., now on duty in the General Hospital at Annapolis Junction, to join his regiment without delay.

Assistant Surgeon Antony Heger, U.S.A., now at Philadelphia, Pa. (he having just passed his examination for promotion, to relieve Assistant Surgeon C. Wagner, U.S.A., in charge of the General Hospital at Point Lookout, Md., the latter on being relieved to report to the Medical Director, Army of the Potomac.

Surgeons James Bryan and T. A. Worrall, U.S.V., now on duty in this city, will report for duty at the Headquarters of the Department of the Tennessee.

Surgeons G. W. Stipp and John C. Dorr, U.S.V., now on duty in this city, will report for duty at the Headquarters, Department of the Cumberland, as soon as the hospitals under their charge are closed.

Surgeon W. T. Thurston, 1st Rhode Island Artillery, now on duty at the Campbell Hospital in this city, will rejoin his regiment without delay.

Assistant Surgeon J. T. Ghiselin, U.S.A., as soon as examined for promotion, to relieve Assistant Surgeon S. A. Storrow, U.S.A., in charge of the Eckington Hospital in this city.

Assistant Surgeon H. L. Schell, U.S.A., now on duty in Judiciary Square Hospital in this city, to relieve Assistant Surgeon J. S. Billings, U.S.A., in the West Philadelphia Hospital.

To the Army of the Potomac, to report to Surgeon Jonathan Letterman, U.S.A., Medical Director:

Assistant Surgeon W. H. Forwood, U.S.A., now on duty in the Medical Director's Office in this city.

Assistant Surgeon Samuel A. Storrow, U.S.A., now in charge of the Eckington Hospital in this city.

Assistant Surgeon Bolivar Knickerbocker, U.S.A., now on duty in the Finley Hospital in this city.

Assistant Surgeon H. A. Du Bois, U.S.A., now on duty in Hospital No. 1, Frederick, Md.

Assistant Surgeon J. S. Billings, U.S.A., now on duty in the West Philadelphia Hospital.

Assistant Surgeon T. G. McKenzie, U.S.A., now on duty in Hospital Camp "B," Frederick.

Assistant Surgeon Wm. M. Natson, U.S.A., now on duty in Hospital Camp "A," Frederick.

Assistant Surgeon E. D. Breneman, U.S.A., now on duty in the West Philadelphia Hospital.

Assistant Surgeon George M. McGill, U.S.A., now on duty in the Lincoln Hospital in this city.

Assistant Surgeon J. B. Brinton, U.S.A., now on duty in Fort McHenry, Baltimore.

Assistant Surgeon W. H. Picot, U.S.A., now on duty in the Eckington Hospital in this city.

To the Department of the Tennessee, to report in person to the General Commanding, and by letter to the Assistant Surgeon-General R. C. Wood, at St. Louis, Mo.

Assistant Surgeon S. H. Horner, U.S.A., now on duty in the Finley Hospital in this city.

Assistant Surgeon D. L. Huntingdon, U.S.A., now on duty in the Medical Director's Office, Fort Monroe, Va.

Assistant Surgeon C. S. De Graw, U.S.A., now on duty in the General Hospital at York, Pa.

To the Department of the Cumberland, to report in person to the General Commanding, and by letter to Assistant Surgeon-General R. C. Wood, at St. Louis, Mo.:

Assistant Surgeon A. H. Smith, U.S.A., now on duty at the West Philadelphia Hospital.

Assistant Surgeon C. C. Gray, U.S.A., now in charge of the General Hospital at Wilmington, Del.

Assistant Surgeon Webster Lindsberg, U.S.A., now on duty with the 18th Infantry, Department of the Cumberland, to report to the Medical Director, Baltimore, Md.

By order of the Secretary of War,
L. THOMAS,
Adjutant-General.

Obituary.

HENRY NEWTON FISHER, M.D.

DR. HENRY N. FISHER died in the 29th year of his age, in this city, on the 16th of March, of typhoid fever, contracted during his service in Eckington Hospital, Washington, D.C. He graduated at the N. Y. University in the year 1855, and immediately thereafter commenced the study of medicine, receiving his diploma as Doctor of Medicine in 1858. Shortly after this he entered the N.Y. Hospital as senior walker, and completed his term of service in that institution in 1860. He then located himself in the upper part of this city, and commenced the regular practice of his profession. At the commencement of the war he made a voluntary offer of his services to the Government, and spent a considerable time upon the Sanitary Commission transports. In October, 1862, he became attached to the Eckington Hospital, Washington, in the capacity of contract-surgeon. Here he worked diligently and faithfully until he was taken sick and was removed to his native city. A short time previous to his illness he passed the Army Medical Board, and subsequently received his commission as Asst.-Surgeon, U.S.A. He, however, never entered upon his new duties. During the past two years he contributed, from time to time, to the columns of the TIMES many creditable Reports of surgical cases occurring in his hospital practice. With the advantages of a thorough education, and with a determination for work, he already began to give promise of distinction. He loved the profession of medicine for the sake of itself, and was indefatigable in the performance of all his professional duties. His qualities of heart were such as to endear him to a large circle of friends, to whom in his death he left a bright example of a life of strict integrity.

Original Lectures.

A CLINICAL LECTURE ON TYPHUS AND TYPHOID FEVER.

DELIVERED AT THE FEVER WARDS OF BELLEVUE HOSPITAL.

By ALFRED L. LOOMIS, M.D.,
PHYSICIAN TO THE HOSPITAL.

PART II.

ALL the patients admitted into the ward, as nearly as could be ascertained, were taken ill suddenly. The majority had well marked chill at the onset of the disease. Heat of kin was not a prominent symptom in most of the cases. Delirium came on early, and in four instances was very iolent; a tendency to stupor was present in most; when oma occurred it was developed suddenly, and, with but wo exceptions, was fatal. In all but ten the countenance ad a livid hue, and the eyes were suffused. Diarrhœa, ain on pressure over the cœcum, tympanitis, and gurgling, were present in only six, in all of which the rose spots were resent. Subsultus tendinum was not marked in more than alf of the cases, and when present was slight, occurring as requently in those who recovered as in those who died. Epistaxis was noticed only in those who had the rose-olored rash. Hæmorrhage from the bowels occurred in but one case, which was fatal on the sixteenth day. In hirty-two cases a petechial eruption was apparent over the whole surface by the seventh day; at its first appearance t was bright, partially or completely disappearing under light pressure; in two days it became dark and was unalered by pressure; it was visible in each case until convalescence was established; one death occurred; in two there was no eruption. In the remaining case a few spots only ppeared on the chest and abdomen of a bright rose color, eadily disappearing under slight pressure, each spot remaining only two or three days and then followed by successive crops of eruptions. The question now very aturally arises—Have we had two distinct fevers with two istinct eruptions, or only one fever with two varieties of ruption? The profession is divided on this subject. From he closer observation you have given the cases, as they ave occurred the past two months, you are, I think, perfectly prepared not only to recognise two distinct erupions, but that in patients lying side by side having the erupions, there has been a clear and unmistakable difference n the symptoms, mode of access, march, duration, and conalescence, as well as in the effect of stimuli; and that following these eruptions to the dead-house the lesions have differed as widely as the eruptions. True, unless the eruption makes the distinction, there is no sufficiently onstant distinction during life;" but the same may be said f the exanthemata. I will take a step further; in tracing ut the origin of these cases, not in a single instance have found typhus, contagious followed by typhoid symptoms, but always by typhus and vice versâ. On the eruption then, and that only, are we to rely for a certain diagnosis. When it has not been present, or not characteristic, I have elayed the diagnosis; but when the petechial rash of typhus has been copious (as in thirty-two of the cases), I have not hesitated to call it typhus; and when, on the other hand, the rose-spots of typhoid have been present (as in six cases), have been equally as certain of typhoid. There are those who are sceptical on this point; yet the marked contrast between the measly rash of typhus covering the whole surface, and the isolated rose spots of typhoid, appearing by wos and threes from day to day on the abdomen and horax, ought (it seems to me) to leave no doubt. In three of those who died (on whom autopsies were obtained) the kidneys presented unmistakable evidences of fatty degeneration; in each of these cases death had been preceded by sudden coma, the patients apparently doing well until the coma occurred. A trace of albumen was found in the urine of two. Care in future examinations will, I hope, determine how constant coma and Bright's kidney occur together in typhus. No microscopic examination of the urine was made in these cases.

There was but one death among those under twenty years of age, while among those who had reached adult life about one half died; in fact only five adults, who were very ill, recovered.

In all the cases stimulants were administered more or less freely; in fact stimuli and nourishment have constituted almost the entire treatment. In the majority it was commenced early, so early in one or two cases as the second day. In many of the cases large quantities have been given (as 60 ℥ per day). The guide in its administration has been the pulse; when it became frequent and feeble stimulants were increased in sufficient quantities to control it without regard to the amount administered. With but one exception, where the pulse has not responded to the stimuli, the case has terminated fatally. In those cases where the rose-spots were present, the average amount of stimulus required has been much less than in others, and was commenced later in the disease. The younger the patient the more sure and prompt was the response to the stimulus. Its use was continued in all cases of recovery until convalescence was fully established.

I cannot close without making special mention of one who has served me so faithfully as acting House-Physician, I refer to the late Henry W. Cook, M.D.

When, one year since, he passed his examination (than whom none stood higher), and entered Bellevue Hospital, he bade fair for a life of usefulness and position. A thorough student, striving to grasp all knowledge within his reach, earnest and assiduous in his labors, always at his post, never having left the hospital even for a day, since his admission. Although at the commencement of his service in the fever-ward he expressed some fears lest he might contract the disease, those fears never prevented him from faithfully, and more than faithfully, performing the duties devolving upon him. I add, without comment, the record of his illness, and of the post-mortem appearances, as made by Dr. T. K. Chandler, house-physician.

Henry W. Cook, aged 26 years, well developed and strong, was taken with chills on the 4th of March. He had no predisposition to disease, save that he had been closely confined to the hospital for many months, and had spent considerable time in the fever ward. After having chills he continued feverish and uncomfortable for several days, and expressed fears that he was going to have typhus fever. During this time his bowels were constipated, his pulse was somewhat accelerated, and he complained of pain in his head, which he thought to be neuralgia, and he had a tooth extracted, believing that the pain proceeded from that. On the sixth day, as he felt no better, but rather worse, he kept his bed; and on the seventh day, a rather sparse eruption appeared on his abdomen, the spots being bright, and disappearing fully under pressure. This eruption extended in two days to the arms and legs, and after this time it did not disappear under pressure; it also became of a darker color: it was not papular in its character. At this time, and subsequently, the tongue was considerably furred and the pulse more frequent until the tenth day of the disease (dating from the commencement of the chills, the pulse ranged between 90 and 95 beats per minute); but on the tenth day it rose to 118 beats, and it fluctuated between 108 and 118 from that time until the fourteenth day. On the thirteenth day it suddenly became very weak, and the patient seemed to be much prostrated. On this day he had five diarrhœal passages, fluid, dark in color, and very offensive; previous to this he had had no spontaneous passages, but had required injections daily. On the fourteenth day he seemed much better; there was no delirium, of which there had been a little during the nights immediately preceding. The pulse was full and regular, and of about 108 beats per minute. The countenance was bright and cheerful, and the tongue appeared cleaner than before; it had never been dark or dry. The patient sat up in bed and shaved himself in the morning, and during the day he wrote two prescriptions for himself, which evinced perfect steadiness of hand. His manner was cheerful and natural, and when asked whether he would like to have his friends apprised of his illness, he said he would not at present, but that in a few days, when he should be strong enough, he would like to have them come and take him home. Altogether his appearance was so favorable that his attending physician and the resident staff of the hospital considered him out of danger. At ten o'clock P.M. he was in the same favorable condition. He took his hourly quantity of brandy (℥ iss) and his beef-tea as usual. His pulse at this time was about 82 beats per minute and full. He seemed disposed to sleep. From this time until two o'clock A.M. he refused to take any nourishment, and only a part, probably about half, his usual quantity of brandy. At this time his pulse was 100, and rather feeble. He was at once required to take his allowance of brandy and of nourishment, and from this time until morning he took them regularly. At seven o'clock his pulse was about 120 beats per minute, and quite feeble, and the brandy and nourishment were increased to double the quantity he had been taking. He was perfectly rational at this time, and frequently complained of great weakness. About nine o'clock he suddenly sank into a profound coma, from which he never awoke. During the first hour he was in this condition his pulse sank to 70 beats per minute, but after that it rose to 130, 140, and so high as 150 during the last hours of his life. The number of respirations, which at first was entirely out of proportion to the heart's pulsations, gradually increased to 35, and even 40, during the last hours of life. During this period, the expirations were occasionally puffing in character. The pupils, during the early stage of coma, dilated, but at a later period they were moderately contracted, and but slightly sensible to the influence of light. Swallowing was very difficult throughout this period, and during the last few hours impossible. Soon after the patient entered the condition of coma a blister was applied to the back of the neck, and a large mustard plaster to the abdomen. At a little later period a turpentine stupe was applied to the chest, but none of these measures seemed to produce the slightest effect on the patient; and from the time he became comatose he never moved a limb, nor opened his eyes, nor gave any signs of consciousness. At the order of the attending physician turpentine was given in drachm doses by the mouth, but it excited so much irritation of the larynx that we were obliged to desist from giving it, except per rectum, in which manner brandy, carb. am., and nourishment were also freely given, but to no purpose. The bronchial tubes gradually became obstructed, the respiration more frequent, and the heart more feeble, until ten minutes past nine o'clock P.M., when the patient breathed his last.

An examination of the body was made by Drs. Paine and Sears nineteen hours after death, Dr. Loomis being present, together with many of the house staff.

Sectio Cadaveris.—Nineteen hours after death. Body still warm, rigor mortis moderately well marked; whole posterior aspect of body ecchymosed from post-mortem capillary stains. The body appeared to be well nourished, having undergone no emaciation; abdomen not at all tympanitic. Upon removal of the calvarium marks of venous congestion were presented. Raising the dura mater the arachnoid membrane was found lifted up from the surface of the brain by sub-arachnoid effusion; the convolutions were sharply defined. The arachnoid was intensely congested. The brain was somewhat harder than natural, and its vessels intensely congested. Opening into the ventricles (lateral) no effusion was found. Opening the abdomen the intestines appeared, presenting a perfectly healthy appearance, with the exception of three small spots of congestion. Opening the intestines, three of the Peyerian patches were seen imbedded in the three congested spots; they were moderately enlarged. Nothing abnormal, however, was seen in the patch at the ileo-cœcal valve. The right kidney was considerably enlarged and intensely congested; upon section it had the appearance at one end of an apoplectic clot; blood exuded from it freely; there was no disproportion between the cortical and medullary portions. Left kidney not so much enlarged nor congested, nor had it the apoplectic appearance of the right; other appearances were the same. The urine was drawn off and examined by heat and nitric acid, and found to contain a marked amount of albumen. The microscope showed fatty casts, and a microscopical examination of the structure of the kidney showed well marked fatty degeneration.

Original Communications.

A REPORT OF TWELVE
GUNSHOT FRACTURES OF THE THIGH,

TREATED CONSERVATIVELY IN THE U. S. ARMY GENERAL HOSPITAL, "NATIONAL," CAMDEN STREET, BALTIMORE, MD.,

READ BEFORE THE U. S. ARMY MEDICAL AND SURGICAL SOCIETY OF MARYLAND.

By EDMUND G. WATERS, M.D.,
ACTING ASSISTANT SURGEON U.S.A.

On the 21st and 25th of July, 1862, between four and five hundred sick and wounded Union soldiers were received into the National Hospital, Baltimore. Most of the wounded had been shot in the Seven Days' Fight, and being taken prisoners by the Confederate army had been sent to Richmond in various conveyances, and subsequently forwarded to Baltimore from City Point by steamer. Among them was a number with fractured thighs, and a better opportunity has rarely been afforded to test the several modes of treatment in secondary cases after this kind of injury than these presented.

The writer regrets that he is not able to give the exact number of amputations performed for this injury, but is able to state positively that only one patient recovered of the many who underwent the operation. In this case the operation was performed in the upper third of the thigh.

In three cases the femur was resected; in one the head of the bone and part of the neck were removed in one at the upper, and in the last at the middle third. These patients all died within a fortnight after the operation, and the autopsy in each case revealed the melancholy fact that nature had made no attempt at reparation. The same fatality attended five out of six cases where similar operations were performed by the British surgeons in the Crimea.

In fourteen cases the attempt was made to save the limb. Of these, three died: one of fracture of the upper third, in which the bullet had passed deeply through the muscles of the opposite thigh, and through the upper part of the scrotum, nearly the whole of which subsequently sloughed from exhaustion and pain; one of fracture at the middle third, of profuse suppuration; and one of fracture at the lower third, from sloughing of the femoro-popliteal artery.

Nine were discharged the hospital already using their injured limbs in standing and walking with considerable facility, and in the judgment of their attending surgeons to a degree fully justifying the memorandum of "cured," which was attached to their respective surgical cards at the time of their discharge.

In one of these cases the fracture was in the neck of the bone, an injury which Mr. Guthrie says he not only has never known an individual to recover from (except in a single case after amputation at the hip-joint performed by himself), but has not even known one to survive it for a longer period than two or three months.

In two others the fracture was in the upper third, in three at the middle, two of which, however, were at its point of junction with the upper, and in three at the lower third of the bone.

The remaining two of the fourteen continue under treatment. One of them goes out daily on crutches; the other is confined to bed with a slight discharge. The union in both is perfect, their general health excellent, their spirits buoyant, and it requires no excess of professional confidence to be convinced that only a short time will elapse before both patients will be completely restored to health, and will enjoy valuable use of their limbs.

The tenth case of discharged patients is that of a Confederate, wounded at Antietam, who stopped at the "National" a week or more *in transitu* south. The fracture, in his case, was in the upper third of the bone.

The writer cannot conclude these brief and imperfect remarks without adding his sincere though humble testimony to the invaluable efficiency of the "anterior splint," the invention of Prof. N. R. Smith of Baltimore, in the treatment of this class of injuries. The successful result in Captain Bugh's case was clearly attributable to its use. Deprived of its simple but extraordinary agency, he is sincerely convinced that but a small minority of the cases treated would have been saved to furnish the satisfactory record that follows. Its general use promises to revolutionize this part of the surgery of war, and to render frequent and usual in our time results which only a few years ago had rarely or never fallen under the notice of a surgeon unparalleled in the extent of his experience and observation.

I.—Private Wm. O. Hart, Co. H, 14th regiment, N. Y. Volunteers, aged 18, native of Cicero, Onondaga county, New York, farmer, of sanguine temperament and good constitution, was wounded at the battle of Gaines Mill, June 27th, 1862, while facing the enemy. He was carried to the rear immediately, and lay for half an hour between two fires behind a tree. While thus exposed he was wounded by another bullet, both wounds being received in the same thigh. He remained on the field thirty hours, and was then placed in a spring-wagon and carried to a hospital tent about a mile distant. Staying there six hours he was put into a Government wagon and taken to Richmond, a distance of ten or twelve miles over a rough road, the journey occupying about three hours. There he was placed in the Libby prison, where he remained under little or no surgical care until July 19th, when he was taken to the depot to be forwarded north, but the cars being crowded was obliged to return.

July 22.—He was shipped aboard the cars, and sent to City Point, changing once at Petersburg, and on to Baltimore by steamer.

July 25.—He was admitted into the National Hospital; his condition at the time being much enfeebled, partly in consequence of a severe diarrhœa with which he had been afflicted since first he was carried to Richmond.

August 5.—The anterior splint was adapted, and the limb kept suspended until August 15th, when the patient was taken to the operating-room to have the fragments of denuded bone removed. A number of large pieces, representing severally the entire thickness of one side of the shaft, had presented themselves previously at the external orifice of the wound, and were easily extracted. On this occasion others of large dimensions were found denuded of their periosteum, and were likewise removed. A fragment of bullet had been discovered by the surgeon in attendance at the hospital tent, soon after the wounds were received, and removed with the forceps. The first bullet entered the inner side of the right thigh three inches above the condyle of the femur, passed transversely through the limb, under the bone, without wounding either it or the great vessels, and emerged on the outer side at a point opposite that of entrance. The second bullet, presumed to be of the minié variety from inspection of the fragment detained by the patient, entered the posterior aspect of the same thigh at its middle third ten inches above the knee-joint, and passed horizontally forward fracturing the bone, a part of it emerging anteriorly opposite the point of entrance. The other part was found and extracted in a condition so battered as hardly to be recognisable.

Oct. 18.—The discharge from both orifices of the second wound still continues profuse, although union is complete. The limb many be moved in any direction natural to it without much inconvenience. The position of the foot and leg is natural. The muscles of the thigh and leg are much wasted by confinement to bed, bandaging, and protracted discharge. The patient coutinues in bed, his leg unsustained by splints, and, although his condition indicates feebleness, it is much better than at any time since his admission, and is manifestly improving. Shortening amounts to three-quarters of an inch.

Feb. 20, 1863.—This man goes out on crutches daily, and, from the satisfactory progress he makes, affords every desired indication that he soon will be able to lay them aside. He has lost, at various times, an incredible amount of bone from his thigh, and is accustomed to exhibit to visitors massive cubes of it, collected from time to time, which he preserves with scrupulous care.

II.—Private David Rorke, Co. H, 22d Regt. Mass. Vols., native of Ireland, aged 22, single, carpenter, was wounded at the battle of Gaines Mill, June 27th, while in the act of loading. Was carried to a house near the field of battle soon afterwards, and remained there three weeks. He was then taken to Savage's Station in a baggage wagon, and sent to Richmond in the cars.

Admitted July 21.—At this time he spoke only of a wound at the inner edge of the crest of the right ilium. There was a trifling discharge, the patient not at all enfeebled, but as he complained of some pain, and represented the wound to have been caused by a piece of shell, it was dilated for the purpose of searching for any foreign body. None was found, but the inner surface of the bone was discovered to be denuded over a space an inch square.

Aug. 5.—The patient was taken to the operating-room to have the surface of necrosed bone removed. On exposing his person some unnatural convexity of the right thigh was observed, occasioning a slight deformity of the limb.

A wound nearly healed was likewise discovered in the popliteal space at its lower border. Mensuration revealed a shortening of an inch and a half. A callus, sufficiently voluminous slightly to disfigure the natural contour of the limb, was fouud to exist about five inches above the knee-joint.

On being interrogated the patient said he had received the latter wound first, and that while lying on the ground he had been struck by a fragment of shell. The wound in the popliteal space had caused so little trouble that he had uot directed atteution to it. Neither himself nor his surgeons who had charge of him previous to his admission to this hospital had noticed a fracture of the femur. Of course no apparatns had consequently been used. Notwithstanding the fact that no professional attention had been bestowed upon it the position of the foot in relation to the limb is natural, and only what is esteemed moderate shortening has taken place.

Oct. 20, 1862.—Cured, and discharged the service and the hospital.

III.—Sergt. W. H. Weber, Co. E, 16th Regt. N. Y. Vols., aged 19, single, native of New York city, ambrotypist, was wounded at the battle of Gaines Mill, June 27, 1862, while in the act of loading his gun. After lying on the field half an hour he was taken to Watts' House in a rubber blanket; he remained there fifteen days; was taken to Savage's Station in an ambulance, where he stayed a day and a half; from thence to Richmond in the cars, remaining there three days.

Admitted July 21, 1862.—The anterior splint was applied July 23d. The ball entered the inner side of the right thigh at the upper part of the middle third, fractured the bone, and, lodging under the skin at a point opposite that of entrance, was extracted June 29th. His general condition was excellent at the time of admission; there was slight discharge from the orifices of the wound, and he suffered no pain whatever. He stated this to have been the case almost from the moment when the wound was inflicted. The extremities of the bone were freely movable past each other at this time, and when first suspended in the splint, the limb being unrestrained by bandages, the upper one was forcibly abducted, causing much deformity.

Aug. 1.—Union evidently taking place, and the deformity much decreased; the patient complains of no pain, has a good appetite, is very cheerful, and is in all respects in a very promising condition. 20th.—He gets out of bed daily and sits with entire comfort for an hour or more in a chair, the leg in the meantime swinging easily in the splint and yielding readily to every motion of his body; the orifices of entrance and exit of the ball are nearly closed. Sept. 20.—The leg has been removed from the splint for several days, and the patient begins to move about on crutches. There is shortening to the amount of two inches. Very trifling deformity is observed at the seat of fracture. With the exception of slight diarrhœa, caused doubtless by indiscreet indulgence in fruit, his condition is that of nearly perfect health. Oct. 23.—Cured, and discharged the service and the hospital.

(To be Continued.)

REPORT ON HOSPITAL GANGRENE.

By S. J. RADCLIFFE, M.D.,

ACTING ASSISTANT SURGEON U.S.A., U. S. GENERAL HOSPITAL ANNAPOLIS, MD.

(*Continued from page* 161.)

Case II.—Robert Whitehill, private Co. E, 10th Pa. R. C., a tall, able-bodied young man, aged twenty-three years, wounded and taken prisoner at the battle of Fredericksburg, December 13th, 1862, arrived at this hospital via Richmond on the 11th of January, 1863, per steamer New York. He was wounded twice, both by (supposed) conical balls—the first ball entering about four inches below and inwards from the anterior superior spinous process of the ilium of the right side, and about two inches from Poupart's ligament, passing backwards and emerging on the dorsum of the ilium, through the glutei muscles, six inches posteriorly and above the head of the femur; the second ball entering near the tuberosity of the ischium of the same side, passing forwards and inwards behind the femur, and emerging on the internal aspect of the thigh, upper third, posterior to the great femoral vessels. He received the first wound from the front, and on turning to go towards the railroad he received the second. The orifices of *entrance*, at the time of admission, appeared perfectly healthy and healing well, but the points of exit were not in so healthy a condition. There seemed to be a bright red ring of cartilaginous hardness surrounding the wounds at the point of exit, and the inner surface was filled with a grey, pultaceous admixture of bad pus and a watery fluid, surrounding imperfect granulations. His countenance seemed bright and cheerful, his appetite was good, and the secretions natural, and, as in the former case, no gangrene; no abnormal condition was anticipated from a first examination. About the fourth to the fifth day the points of *exit* began to enlarge and smell badly, the discharges becoming decidedly ichorous, and the edges disposed to [illegible]rn up, but were not very jagged or uneven. Besides this the circumscribed redness, noticed in the preceding case, was apparent, but more decided in its bounds and of livelier, fresher color. It occupied in space about one inch and a half each way around the sore, in the inner part of the thigh, which was the worst, almost symmetrical or perfectly round. That at the wound through the gluteal muscles not so large.

The integuments within the boundary at the wound of the thigh gradually yielded to the influence of the poison, became darker and darker, until it appeared as if it had been subjected to the influence of a red or white hot body, *i.e.* charred, and gradually shrinking, finally gave way, and separating in one homogeneous mass, left the parts as if marked and cut out by rule and compass, but involving very little besides the integuments and subcutaneous tissues, or rather did not penetrate so deeply as in the former case. The muscles not much affected, though bare. The other orifice of exit, that on the dorsum ilii, suffered less in extent superficially, the gangrene extending more in the subcutaneous and intermuscular substances, and burrowed more or less every way, leaving the integuments, though much larger than the original opening, much less affected, and comparatively in a sound condition. It would not be very instructive to trace the disease day by day, as sometimes there would be very little change, but it was about the tenth day after the line of demarkation had been drawn, that the dead matter began to leave the sound structures, during which time the discharges were very slight, but of a serous or watery nature and highly offensive. The points of entrance were not affected by the gangrene, remaining quiescent, with loose granulations about the edges. After the sloughs had separated, and the parts had become clean, the edges of the tissued wound were rather inverted than everted, and a healthier condition at once supervened.

The constitutional symptoms were quite dissimilar to the first case. The disturbance was never so great. He had no decided chill to usher in the attack, and little apparently, if any fever. He was more or less in a depressed condition during the whole period, and he exhibited much anxiety at all times concerning his condition, and also much muscular debility. His pulse was feeble and quick, say 100 to 120 per minute, a pulse of debility throughout; his tongue was clean, though pale; his countenance was pallid, the distaste for food constant, no great thirst, and he suffered scarcely any pain, or at least did not complain much until after the separation of the slough, though he suffered somewhat from sleeplessness. At no time did the fœtor compare with that of the preceding case, nor was it very great. His bowels were not so prone to looseness, and the atonic symptoms were not so aggravated.

The treatment in this case was conducted in the following manner:—After cauterizing the entire wound, its edges and a part of the surrounding tissue, with nitric acid, I applied a large fermenting poultice, consisting of powdered charcoal, one part, corn meal, two parts, mixed into a proper consistency with fresh yeast. I renewed this twice or thrice daily, every other day using the nitric acid to hem it in from further extension. In about five days the slough began to loosen from the sound tissues, and finally by the tenth day the mass separated and dropped out nearly all at once, leaving the muscles and other structures clean and of a bright shining red color. After the parts were cleansed by frequent washings, I filled the cavities thus scooped out with finely picked lint, and saturated it with acid. nitric. dil. cum creasoto of the before mentioned strength, which I had renewed at least twice daily, gradually lessening them as the wound improved. I used also occasionally liq. sodæ chlor. dil.

The internal remedies were nearly the same as in the preceding case. To tr. ferri chlor. ℥i. I added quiniæ sulph. ʒ ss., and gave gtt. xxx. or xl. three times daily, largely diluted with water. I gave him also chalk and catechu when his bowels were loose; solution of sulphate of morphia at night to promote sleep. I gave him also a good nourishing diet, a bottle of porter or milk punch daily, and everything that is usually included in a general supporting regimen, under which he is gradually mending in general health, and granulations are springing up finely in every part of the wound.

Case III.—Jas. C. Jaycox, private Co. C, 40th N.Y.V., apparently of good constitution, aged twenty-four years, wounded and taken prisoner at the battle of Fredericksburg, December 13th, arrived at the hospital, via Richmond, per steamer New York, January 11th following.

He was wounded by a musket ball, kind unknown, probably at short range, in the external aspect of the upper part of the lower third of the right leg, four or five inches above the external malleolus, the points of entrance and exit of the ball being about two or three inches apart. No fracture was perceived.

The wound on admission gave no decided evidence of local mischief, save in this particular, that the openings were quite large, the granulations in that condition when wounds remain stationary for some time, and the edges were a little pouty and irregular, all of which I attributed to want of cleanliness and attention, as he said his wound had not been dressed since he left Richmond, and then very imperfectly. Nor did his constitution seem to suffer in the least from the injury. His health was notably good. His appetite was good, and he slept well at night, and all the secerning organs were performing their functions properly. He did not confine himself in bed, but with the aid of a crutch moved about the room, with every indication that he would soon be well. I used simple dressings, and put him on good diet.

About the fourth or fifth day after admission, the integuments between the orifices assumed, as in the other cases, a dark red or congested appearance, and the discharges were very much lessened, and of a thick, grumious consistence. His appetite failed, his pulse became quick and small, tongue was clean, his countenance and general surface pale, and shivering at the least exposure to the atmosphere, and he exhibited much anxiety and restlessness in regard to his wound and his condition.

From this condition of things the integuments gradually gave way, sinking lower and lower from the surface, and finally resulting in one entire soft, pulpy, ash-colored mass, resembling very much old putrid cheese, which filled the wound completely, adhering to the adjacent parts with much tenacity, and leaving the edges, which were quite circular, though a little jagged and of a diameter of about three inches, thick, shining red, and much everted. This dead fungoid mass adhered so tightly to the tissues below, that it could scarcely be removed by manipulation except in very small particles, resembling then large granules, which were very friable. It now began to enlarge in every direction, slowly but surely, and daily I discovered its borders extending more or less, not only superficially but deeply in the subcutaneous tissues, and in a very irregular manner.

It was not until the slough commenced to separate that he felt much pain. He was somewhat restless at night from the constitutional disturbance which continued *pari passu* with the local affection, but he experienced no direct pain until the muscles were laid bare, and then the weight of the bed-clothes, the application of cold water, dilute nitric acid, or any dressing, or the least handling, caused him much suffering. There was no bad smell at any time equal to either of the other cases, and though the constitution suffered materially, it did not to the same extent as the others. His bowels were easily controlled, but he had the same tendency to looseness as the preceding cases. The pulse ranged throughout from 90 to 120, not much exceeding the latter at any time; his tongue kept remarkably clean, his appetite only medium or fair, thirst not great, skin dry and pale, countenance expectant or anxious, and he was easily affected by the cold air of the apartment. The slough parted little by little with each succeeding washing, and finally, when all were removed, it left the muscular structure beneath in a rough, uneven, or papulous condition; and the edges thick, red, everted, and jagged. By the first of February a healthier action had supervened. Heretofore the changes had been gradual, and the difference in daily reports, though showing progression in the destruction, did not require to be materially attended to. By the sixth of February the parts had become clean, and healthy granulations began to be visible, and with this a marked improvement in the general condition of the patient.

I commenced the treatment of this case by an astringent and anodyne wash of cupri sulph. gr. xvi., ad sol. opii aq., Oj., and the occasional application of Labarraque's solution of chlor. sodæ ℥i. to Oj., ℥j. of liq. chl. sod. ad aquæ Oj. Finding this not successful, I ordered the dil. nit. acid and creasote to be applied with a continuation of the dil. sol. chlor. soda. After the slough formed, I cauterized the whole surface of the wound, the edges, and adjoining sound skin, with the fuming nitric acid, about every other day; and after the slough separated I had the cavity filled with picked lint, and kept saturated with the dil. nitric acid and creasote, gradually lessening and diluting it more as the condition improved. The internal remedies were the same as in the other cases, tr. cal. iron and quinia, morphia to promote sleep, and chalk and catechu to restrain the bowels. He also had beef-tea, porter, etc., etc. The apartment, as in all the cases, was kept well ventilated, all dressings were promptly destroyed, and all means used to prevent an intensity of the poisonous atmosphere.

The above report was made up to the eighth of February, when by direction of the Surgeon-General all cases of hospital gangrene in this hospital were aggregated in wards suitable for them, and placed under the care of one medical officer, with instructions to take notes, and report the result to the Surgeon-General, through Surgeon McFarlin, in charge. It will be seen, however, that the gangrenous condition of the wounds in these cases had been arrested and converted into healthy granulating sores, from which a successful issue might be confidently predicated. They were no longer cases of gangrene, but extensive granulating sores, and, of course, the treatment required was only such as is usually necessary for such reparation. In the case of Dunkle, the officer in charge of the hospital gangrene wards told me that a colliquative diarrhœa, which occurred after leaving my ward, lessened very much his chances for recovery. I am glad to say that this medical officer is leading them on to a successful and happy termination. Dunkle will doubtless have a permanently fixed leg, it being bent at nearly right angles from the contraction of the muscles, but in the other cases there will likely be no deformity. The granulations and repair have filled up the wounds nearly to the surface; and in the natural course of things a short time only will be required to pronounce them in all respects cases of successful treatment. I have had an opportunity of examining these cases up to March 12th.

Reports of Hospitals.

GENERAL HOSPITAL, NO. 19, NASHVILLE, TENN

LIGATIONS OF BRACHIAL ARTERY.

JOHN SHRADY, Jr., SURGEON U.S.V., IN CHARGE.

I.—*Secondary Hæmorrhage.—Ligation of Brachial Artery.—Amputation.*—Edward Pepper, 1st Battalion, 18th U.S.V., Co. B, æt. 35, admitted Jan. 5, of good constitution and fine muscular development, with a predominance of the sanguine temperament. Wounded Dec. 31, missile entering internal aspect of right forearm, about its middle third, and emerging just above the elbow externo-posteriorly. Keeps his arm flexed at a right angle. Says he lost considerable blood on the field. Jan. 8.—Attacked with a profuse hæmorrhage from the upper orifice of the wound, which was restrained by an intelligent nurse until the arrival of assistance. As this occurred at night compression and elevation of limb were resorted to as a temporary expedient. Jan. 9.—His limb is much swollen, and he complains bitterly of the pressure of the tourniquet; on loosening this appliance the bleeding did not return, but deeming its entire withdrawal unsafe a nurse was specially detailed with full instructions of his duty in the premises. Jan. 10.—After the lapse of thirty hours, there was a recurrence of the same alarming hæmorrhage. Uncertainty as to its exact source, and the condition of the wound itself, forbade our cutting down upon any given point to secure the vessel or vessels at fault; the ligation of the brachial artery was resorted to as being the means most likely to promise success. This was performed during anæsthesia, the subsidence of the swelling, consequent upon the compression, adding not a little to the facility of the operation. Jan. 22.—Ligature came away a few days ago. Incision granulating up finely apparently, an effectual stop to the hæmorrhage. No untoward symptoms; complains somewhat of weakness, but this does not prevent his walking up and down his ward quite frequently. Jan. 29.—Appetite good. Nothing worthy of note, except that the original wound does not show symptoms of healing up; he is very fearful of making the slightest motion lest he be again attacked by his old trouble. Feb. 10.—Has been complaining for some days back of a soreness on the space opposed to the olecranon, but to this not much importance was attached, and now the hæmorrhage has returned, ushered in by a slight oozing. There is communicated to the finger, upon its introduction within the wound, a sensation of sponginess, and but little resistance is made to its movements in any direction. There is, besides, a blue sloughy look present, and some of the features of necrosis. Ordered compression as in first instance. Feb. 12.—Ligation of the axillary artery having been on consultation voted of doubtful expediency, amputation of the arm was performed in preference. An examination of the removed limb showed an establishment of the collateral circulation, an embedment of a bullet fragment, spicula of bone apparently from the coronoid process, and fibro-cartilaginous deposits. The passive motion, which was recommended to overcome the anchylosis, may have solicited the hæmorrhage, but of this we are not certain. Feb. 28.—His vigorous constitution and fondness for stimulants have served him well. The ligatures have detached themselves. There has been some attempt at union by the first intention, and the suppurating process at no period has been in excess. At the posterior edge of the surgical wound there is a somewhat ulcerous spot, but this is now granulating, and being out of the way of all probable pressure is not likely to cause trouble. March 7.—The stump, up to this time, has been suppurating off and on, but on the whole has never claimed much of patient's attention. Appetite good. March 17.—Stump almost entirely healed. Has been out to-day upon a pass, and does not consider himself a patient any longer.

II.—*Secondary Hæmorrhage.—Ligation of the Brachial Artery.*—John Quinn, 1st Battalion 18th U.S.I., Co. C, admitted Jan. 5, received a gunshot wound of the left arm, at the junction of its middle and lower third, some five days previously. The ball passed completely through the muscular tissue without implicating the bone. He fainted upon the field, probably from loss of blood. All his functions are normal, and his case presents no remarkable features. Jan. 10.—Considerable hæmorrhage from both orifices of wound, but rather more from its external side. Compression by tourniquet resorted to. Jan. 11.—Not even the most thorough probing can solicit the hæmorrhage, so further surgical interference was deemed inexpedient. Continue treatment in case of a return of the trouble. Jan. 22.—Everything up to date has gone on well, even to an almost entire closure of both orifices of gunshot wound. The hæmorrhage returned this afternoon, ushered in by a slight oozing. Ordered compression, as in first instance. Jan. 23.—Brachial artery ligated at its upper third; in this case two ligatures were used about one-eighth of an inch apart, as a safeguard against probable hæmorrhage from distal extremity of the vessel. Ordered arm to be wrapped in cotton and flannel. Diet full, with stimulants. Jan. 25.—Doing well. Beef and concentrated beef-tea are freely exhibited with a view to their fibre-making properties, and the rapid organization of the clots at the extremity of the ligated vessel. Jan. 28.—Surgical wound, to quote patient's phrase, "still runs." The gunshot injury is not likely to give further annoyance. Temperature of arm operated upon much lower than that of its mate. Jan. 30.—The ligatures came away with the dressing. Every portion of wounded tissue has now cicatrized over. Feb. 28.—Has suffered from nothing unusual save a pain in his left palm, which, according to his representation, is persistent; partial anchylosis of elbow-joint; a much diminished temperature of the arm from point of ligation downwards. There is, besides, an atrophy of the muscles, which may be due as much to a want of use as to any injury of nervous system or failure of full arterial supply.

Reports of Societies.

NEW YORK COUNTY MEDICAL SOCIETY.

ALFRED UNDERHILL, M.D., PRESIDENT, IN THE CHAIR.

The Society held a regular meeting on Monday, March 2d, 1863, at 8 P.M., at the College of Physicians and Surgeons.

The reports from the Committee on Diseases prove that the short month of February has been an unusually fatal one, the statistics showing a steady increase of deaths by virus diseases.

The observations made by the Meteorological Committee during the month of February inform us that the mean temperature of evaporation for the month was 27°; the minimum point was 6° below zero, and the maximum point was 48°.

DISCUSSION ON TYPHUS AND TYPHOID FEVERS.

Dr. Henschel opened the discussion on typhoid and typhus fevers by stating, that a few months since he read before the Society a fragmentary paper on typhus fever, at that time giving the individual views on that disease and its treatment. He was now to open the subject, and would endeavor to present points which might lead to discussions. Dr. H. considers typhus a blood disease of zymotic origin, and of a cyclical type, meaning that the disease by its own accord and nature would, after having itself run out, return to health, if death had not been occasioned by a grave affection of one or the other of the important organs. Typhus may assume different forms, different diseases, but he maintains that there is no real difference (except in the localization) between typhus and typhoid fevers. All the different forms have something specific in common, all originating from the same sphere of contagion, all have an undoubted similarity of symptoms, all a tendency to eruptions of a kind of roseola, and they require all a similar treatment. The subdivisions of typhus Dr. H. made out to be: Febricular, relapsing fever, whose characteristics are congestions of the liver and spleen, and in some manner allied to malarial disease; Exanthematic Typhus or petechial fever, with prominent localization on the skin; and Heat Typhus—the "*fièvre typhosse*," of the French, or abdominal typhus, characterized by localization in the intestines (Griebinger).

Schnepps says, that one form of the disease may, under favorable circumstances, turn into another.

Magnus Huss saw the different forms of the disease originate from the same cause, in the same locality. Cazales, who had a vast experience in the Crimean war, says, it is impossible to discriminate between the exanthematic and the abdominal forms at the bedside.

Naumann says that in abdominal typhus the miasma enters into the circulation, not through the lungs, but from the lower part of the ileum. After quoting these authorities Dr. H. proceeded to state that the exanthemic form is more contagious than the ileo-typhus, and females are, according to Lebert, less subject to the roseolas of typhus than males. Hæmorrhage from the bowels, even without perforation, is generally considered very unfavorable, but he saw five cases with copious hæmorrhage, whereof three recovered. One subject of the last of these came from

Virginia, having contracted the disease in camp. Roseola and other diagnostic symptoms of typhus were well marked on the abdomen (where he showed the marks of a vesicatory), a great many cellular abscesses appeared; about the same time hæmorrhage from the bowels occurred, which continued for about four days. A few days afterwards he had a sudden attack of apnœa and inability to swallow, which was but momentary, but repeated itself a few days later From that time the voice became changed, suffocatory symptoms recurred frequently, until they became so imminent that Dr. Buck was called in to perform tracheotomy. It is now more than sixteen months since this laryngo-typhus made its appearance, and the patient still carries the canula in the tracheal wound. An operation has since been resorted to to discover any foreign growth, but unsuccessfully; the laryngoscope showing only a thickening of the mucous membrane, covering the vocal cords.

Dr. Thomson commenced by stating that he had taken notes of some two hundred and twenty cases of typhoid and typhus fevers, occurring under his care, while physician at the Quarantine Hospital, and never had any difficulty in distinguishing the two different forms after the second week, and does not believe in their identity. The relative duration of the two diseases was well marked. Typhus does not survive three weeks, while typhoid lasts for four weeks.

Complimenting Plato, Hippocrates, Galen, and the Greek and Roman physicians, as excellent describers of disease, they were nevertheless poor pathologists. Reference was made to the faithfulness in symptomatology, it being the chief value of these ancient medical writings, especially on the subject of typhus. He thinks that an impartial examination of them will show that "genuine" typhus and typhoid fevers were unknown to them. Dr. T. feels sure, that the accounts given by Hippocrates and Galen will be found to apply only to malarial fevers, with adynamic and typhoid characters, where an extreme degree of malarial infection exists, such as we see in the second stages of bilious, remittent, or yellow fevers.

These considerations applied themselves also to the Arabic physicians, who improved upon their Greek and Romon predecessors in the study of the types of fever, carefully noting the distinction of symptoms existing between the sthenic and inflammatory fevers, and those of an adynamic character. But even here we find again nothing but the processes of malarial fevers or the epidemic plague.

Another reason advanced by Dr. T. for their ignorance of typhus consisted in the fact that even to *this* day, neither typhoid nor typhus fevers prevail anywhere in the East, except in places where Europeans had but lately imported them.

Dr. T. maintained that typhus is of modern origin, belonging to the great class of virus diseases, having all the remarkable and distinctive characters only belonging to that class of disease; so peculiar, as at once to separate them from all other classes and summed them up briefly as follows:—1st. Virus diseases have historic beginnings; thus, the Greeks knew nothing of variola, the Romans nothing of scarlatina, the Arabs of cholera, etc.; just as at present the latter know nothing of typhus. They are therefore not functional diseases, like pneumonia. Neither did they originate from filth, rain, the sun, from wind or gas, or from crowding together human beings or animals; for all these causes have in all times existed 2d. They are two specific diseases, arising only from themselves. 3d. This class of diseases possesses the very remarkable property of reproduction in the human system. Unlike all poisons, they cause mischief, not by entering the system "*solely*," but by reproducing themselves to such an extent so as greatly to disturb the bodily functions, and cause diseases each after its kind. 4th. But this reproduction, with all its consequent morbid symptoms, is invariably preceded after the entrance of the virus by the singular stage of incubation, which varies in length according to each particular virus; that of measles, for example, being twice as long as that of scarlatina. A virus cannot possibly act, until it has gone round and round in the circulation some millions of times for hours or days or weeks, or even months, before any trouble arises. How astonished would we be, on the other hand, with an animal into whose veins we have injected arsenic, if it did not begin to feel uncomfortably until the seventh day, or if, on giving strychnia, it would not have its first fit until three weeks afterwards. 5th. Viruses, when they do act, present symptoms in a definite succession, regular in time as well as character, one specific symptom developing after another, just as leaves follow buds, and flowers leaves, and fruit flowers; and as no man ever witnessed the fruit without the others first, and only after so many days or weeks, so no one can reverse the steps of a virus, and have a small-pox scab come before the pimple, or the pustule before the fever, or the fever without the incubation. 6th. Viruses have but slight dependence on *quantity*, though we have seen that *time* is a necessary element to them; thus, the lymph that barely moistens the tip of a lancet, will produce the same results in the same time as the injection of a teaspoonful. Poisons, on the contrary, act according to the amount of the dose. 7th. As a necessary result from the capacity of reproduction, is another remarkable trait of viruses, namely, communicability; they must propagate wherever they find their soil, and that soil being in some animal bodies, any such animal coming near a virused animal is thereby endangered. What is there analogous to this in the action of poisons? Who fears to approach a man bitten by a viper, or a suicide by laudanum? 8th. Viruses, like all seeds, owe their greater or less development not to themselves but to the *soil* into which they happen to fall, and to the influences of the season; most of the seeds fall by the wayside, and having nothing to grow upon, straightway they die out. Thus in every epidemic a vast majority of those exposed escape altogether. But the same seed sown at the same time springs up in one thirty fold, in another sixty, in another hundredfold, and kills the last. One year the crop rewards death with a tremendous harvest; the next year, owing to climatic causes, the viruses will spring up only here and there. Now, how as to poisons? Have they an epidemic constitution from year to year? Will serpents vary in *their* malignancy, or will a year come around when tartar emetic will not vomit? 9th. Viruses, "semel tantum in decursu vitæ aliquem afficientes," make but one visit. Mercifully ordered is this strange fact, for otherwise the human race would soon be numbered with the fossils. But does not this of itself prove that these are not functional diseases, like pleurisy and rheumatism, nor animal poisoning agents either, for who would ever get used to a centipede or a cobra?

We have adduced these considerations to show that virus diseases are separated by such essential distinctions from all other morbid processes that they must be purely specific maladies, and however closely their symptoms may resemble those of other diseases, yet, if they have the virus characters, they cannot be confounded with them. Thus, some viruses may cause coughing, some diarrhœa, and some fever; but Asiatic cholera and diarrhœa are very different things; pertussis is not bronchitis only; so also typhus is not fever *only*.

Now, typhus and typhoid fevers can be proved to present one and all of the peculiar characters of viruses. Thus, we have known a gentleman simply walk past a row of sick emigrants, holding his nose at the time. The emigrants presented the worst symptoms of maculated typhus, but from the great size of the room and the distance which this gentleman was careful to maintain from the sick, the dose of typhus virus which could have reached him must have been small indeed. For seven days he felt no change, but on the eighth virulent typhus developed in him, not only to his own destruction, but also to the infection of several who came near him. Here we have the incubation, the reproduction, the definite course, and the propagation of a virus, with the minutest original quantity.

(*To be Continued.*)

FOREIGN CORRESPONDENCE.

LETTER XXX.

By PROF. CHARLES A. LEE.

WINES, AND THE WINE-GROWING COUNTRIES.

Coblentz on the Rhine, Sept. 21, 1862.

In Europe, the favorite climate of the vine is between latitude 36° and 48°, that is between the isothermal lines of 62° and 47° 50′, provided the winter line is not below 33°, nor the summer under 66 or 68°. Such is the case in Europe to lat. 50°, and in the United States to lat. 40°, but on our Pacific coast the requisite temperature for maturing the grape is found as high as Fort Vancouver (in the latitude of Montreal), where the fig, citron, orange, lemon, pomegranate, and cotton plant, ought also to flourish. I believe it has been ascertained by Humboldt that the mean heat of the edge of vegetation of the vine must be at least 59° F., and that of the summer from 65 to 67°, and that any country which has not these climatic conditions cannot produce fully ripened grapes or drinkable wine. It is a singular fact that on the table lands of South America where the mean temperature is from 62 to 66°, although the vine may grow and flourish, the grape does not mature, because the temperature is too low and nearly uniform. In no equatorial country can good wine be made where the constant temperature is not, at least, 68° F. The most remarkable vintages of the Rhine wines, I am informed, were in the years 1811 (when the celebrated "*Comet*" wine was produced), 1822, 1834, and 1857, and the mean temperature of these summers was 68° F. One of the poorest years for wine was in 1833, when the mean temperature of the summer was only 63° F. We shall, however, err, if we suppose that the strongest wine always corresponds with the hottest summer, for in addition to this, it appears that a mild autumn is an essential condition to the ripening of the grapes. Thus in 1834 and 1811, which were remarkable over Europe for the quantity and excellence of their wines, the mean temperature of September and October was as high as 62° F., while the mean temperature of the same months in 1833 and other bad years was only about 50° F. I make these remarks to show how uncertain the cultivation of the grape must be in our northern and perhaps mean and middle states, where the conditions for maturing the fruit must often be absent, but in southern Ohio, Illinois, and our southern and southwestern states, generally, as well as on the Pacific coast, all the necessary climatic conditions will be found for perfectly maturing the grape, and the production of excellent wines.

The chief defects of wine are wanting strength and being too acid. Both are owing to want of maturity in the grapes. There is an excess of cream of tartar and free vegetable acids, which disappear as the grape fully ripens, and are replaced by sugar, and this deficiency of sugar in the must is supplied both in Germany and France by adding a quantity of artificial grape sugar, prepared from starch. The quantity of acid is small in warm climates where the grape fully ripens; here the sugar greatly predominates, so that the *ferment* or azotized principle of the must is insufficient for complete fermentation, when we have sweet wines, but if the ferment be sufficient we have strong alcoholic wines, as those of Madeira. These principles are well understood here on the Rhine, where it is a common practice to add sugar and water to the grape-juice in process of fermentation in order to quadruple the quantity without deteriorating the quality of the article produced. The grapes are at first subjected to gentle pressure only, by which a portion of the juice is extracted; then sugar and water are abundantly added to the husks, in order to get the largest possible quantity of wine out of a given quantity of grapes. But the quality is, of course, greatly deteriorated. I found this practice almost universal in the wine districts of France, and was informed that the *vin ordinaire*, and the wine generally met with in the cabarets, was produced in this manner. It is well known that the best Rhine and Moselle wines rarely have any brandy added to them, and that they will keep for a century at least without any alcoholic addition, and yet their alcoholic strength, according to the test in use at the Custom-house in London seldom exceeds 18 per cent. upon the common, and 21 per cent. upon the best descriptions, and yet when going through the wine vaults at the London docks, I was told by one of the largest dealers, that he uniformly added 33 per cent. of brandy to his sherry wines, to adapt them to the taste of the English wine drinkers, who seem to relish only the strong fiery wines.

To show not less the capacity of the human stomach, and the toleration of the pure Rhine wines, I may mention that I have known two gentlemen drink, at a single sitting of six hours, twelve bottles of the best quality, without any apparent excitement or ill-effect whatever. Port wine used in England is known to be reinforced before it leaves Portugal by one-fifth of strong brandy, besides what is added to it in the London docks; which me may presume to be equal to that added to sherry, viz. 33 per cent.! I am glad, however, to observe that the lighter wines of France and Germany are becoming much more extensively used than they were when I was last in England, twelve years ago; so that the consumption of French wines has now reached 25 per cent. and the Rhenish wines over 3 per cent. of the whole amount imported. Still, most of the old English wine-drinkers cling to the use of the strong alcoholic wines, to which they have been so long accustomed; and there is little reason to expect that the *pure juice of the grape* will speedily, if ever, supplant the national drink of the English, viz. *malt liquors.* I think the German wines possess a distinct character from all other wines; being generous (as it is called), drier than the French, finely flavored, and enduring age beyond any other wines whatever. Of late years also they have greatly improved in quality by the great attention paid to their growth, and better management of the vintage. Wine-making has become more of an art or rather science, and the best chemists of the country, like Liebig, Boussingault, etc., have contributed their efforts to aid in its advancement; so that there are great emulation and competition in the different wine districts, and the wines show a corresponding excellence. For instance, there is now a great rivalry between the two vineyards of Johannesberg and Steinberg, so that some years the produce of the latter brings a higher price than that of the former. Five dollars per bottle at the cellars is not an unusual price for it. So the Rudesheimerberg, the Steinberger, and the Graefenberg, are held in nearly equal estimation by wine connoisseurs; and the vineyards of Roth, Koningsbach, and Marcobrunn do not lag far behind. The oldest wine I have met with is of the vintage of 1748, which is still offered to purchasers; though the wines of 1783, yet on sale, bear the highest character of any of the wines of the last century. The opinion, that the nature of any particular wine depends on or is improved by its great age, is not often entertained in this region. The wine is accordingly not kept out of the market so long as formerly. I am sure I cannot explain why it is, that, while much stronger southern wines suffer from age after a certain number of years, even in bottle, these Rhine wines, containing far less spirit, undergo no deterioration by age, but are, if anything, improved; so that the Steinwein of 1748 brought in 1832, 350 dollars for thirty gallons. I found it a very common opinion in England that the Rhine and Moselle wines are more acid than the white wines of France; but I believe it to be a mistake, for the French sulphur their wine casks to prevent the acetous fermentation, which is not practised, as it is not necessary, here; and inasmuch as acids are supposed to generate gout, English physicians forbid their gouty physicians to drink the Rhenish wines, which is certainly a mistake, as the gout is a disease rarely if ever known on the banks of the Rhine, where no other wine scarcely is drunk. This is also the testimony of the physicians of Mayence, who say that the Rhine wines are very salutary, and even medicinal, containing less acid than any others, and are never saturated with brandy, as the French white wines are. Were I to recommend any foreign wine, it would be the highly flavored Moselle, which is now becoming highly fashionable at the first tables in London, and which, when iced, constitutes a most grateful and not unwholesome drink in summer. It is also a cheap wine, costing at Coblentz or Mayence, less than one dollar and a half per imperial gallon. It contains, I believe, more *œnanthic ether* (that volatile principle which imparts that smell and taste which distinguish wines from all other fermented liquids) than any other wine; though the French wines have it in a marked degree, particularly those from the Orleans grape. Tropical wines, it is well known, have no bouquet whatever.

In regard to *sparkling wines* I am told that they began first to be manufactured in Germany about forty years ago from the inferior Neckar grape, and that the process has been continued from that day to the present with increasing success; so that at this time, they compete to a considerable extent with genuine Champagne. There are now manufactories of this wine at Hochheim, Mayence, and Coblentz. I have good reason to know that large quantities of inferior wine, which would not readily find a sale in its unsophisticated state, are thus got rid of, the sweetness and effervescence, as in the case of our Champagne made of Newark cider, concealing and masking the real inferiority of the wine. It is maintained here, by dealers in the article at least, that if the best kind of grapes are selected, and the same process pursued as in Champagne, a most excellent wine is the result and quite equal, every way, to the best Champagne, and greatly superior to most that goes under that name. But the grapes, I believe, are taken from a common growth, and the effervescence produced by the carbonic acid gas in the process of fermentation. The best judges, however, say, that the experiment is a failure; that, although the effervescence of a Champagne wine may be thus obtained, yet the delicious flavor which characterizes that wine will be always wanting, as that flavor is derived from the soil, and can be supplied by no art. I know that large quantities of the lowest class of German wines are imported into France for the purpose of being converted into Champagne, and that fictitious sparkling Moselle is now extensively manufactured in France, labels being used bearing the names of patented German wines. The truth is that Champagne wines, so called, are made in Germany, merely to get rid of the poorer and unsalable classes of wines, and this is confirmed by the little estimation in which they are held in the country of their manufacture; for we cannot suppose it to be fashion or prejudice which causes a preference to be given to French Champagne. Else, why are these sparkling wines designated by French names, and why employ the labels, brands, and mode of packing in vogue among the French manufacturers? If the wine could stand on its own merits, these impositions, I take it, would not be necessary. These wines cost here about seventy-five to ninety cents per bottle, while the best French Champagne (Cliquot or Moet brand) costs about double the price. In 1861 the sale of sparkling Hock and Moselle was estimated at about one million of bottles, which is about one-tenth of the sale of French champagne. But this is too extensive a subject for a single letter.

Dr. Guggenbuehl, who lately died at Basle, has left a sum of 600,000 *francs* to the Moravian Brothers (Frères Moraves), on condition that they keep up the establishment founded by him for cretins, under the name of "L'Hospice Guggenbuehl"—*Brit. Jour.*

American Medical Times.

SATURDAY, APRIL 11, 1863.

THE NEW SCHOOL OF OBSTETRICS.

Practical Surgery is evidently, at the present time, thoroughly committed to conservatism. This rule of practice is so firmly established, that no one would risk his reputation by even the suspicion that he did not fully and heartily assent to it as an invariable guide. Practical medicine, also, long since adopted expectancy as its governing principle, and all representatives of the most advanced views in this branch of physic accept it as a safe if not a universal guide. But what is the tendency of modern obstetric medicine? Time was when the ruling motto among accoucheurs ran thus, "meddlesome midwifery is bad." So earnestly was this idea inculcated by obstetrical professors, that if a graduate forgot everything else this terse sentence rang in his ears every time he approached the lying-in chamber. Many will remember during their natural lives the vehemence with which an eccentric professor, twenty years ago, denounced the forceps, and, incidentally, in language not less severe, the practitioner who would use them. Language failing to give full expression to his contempt of obstetrical operations, he illustrated his meaning by grimaces and a variety of grotesque manipulations of his person which served to fix in the mind of the terrified student the truth that meddlesome midwifery *must* be bad. Such teachings bore their legitimate fruits. Operative interference in obstetric practice was a resort to which every practitioner was brought only after every prudent means was exhausted, and the condition of the patient imperatively demanded assistance. The frequent employment of artificial aid in midwifery practice was an opprobrium under which no accoucheur would willingly rest. It was the pride of practitioners to report the number of cases which they attended annually without the use of forceps. Several of the oldest and most eminent obstetricians of this country can boast that they never had occasion to use the forceps more than once, twice, or thrice in their own practice; nor did they have a considerable annual mortality among their cases. Their records of practice, on the contrary, exhibit a per-centage of deaths too slight for criticism.

But whoever is familiar with current medical literature must have become convinced that a new and powerful school of obstetrical practitioners and teachers is rising into importance, which has for its chief aim to popularize operative midwifery. With them the old text, "meddlesome midwifery is bad," passes for a prejudice of our forefathers. Brushing it away as the rubbish of the past, they have laid as a foundation for the superstructure which they are building, the power and necessity of art to guide to successful issue the processes of nature. While science is leading practical physicians and surgeons to conservatism, its teachings are having a contrary influence upon obstetricians. As the *armamentum chirurgicum* diminishes, the "kit" of the obstetrician increases. Twenty years ago few practitioners had obstetrical instruments, and these were carefully concealed; to-day they are a necessary part of the graduate's outfit, and occupy too frequently a conspicuous place in his office.

The change in obstetrical practice which we have indicated as now in progress must be witnessed with alarm by every believer in conservatism in medicine. Already we witness the sad results which must inevitably follow the inculcation of an aggressive practice in midwifery. Many lying-in asylums give a far larger mortality of puerperal cases and of still-births at full term than formerly; and the history of these institutions shows that the number of instrumental cases is annually largely increasing. Private practice would, if honestly written, give similar results. The medical journals teem with the death-records of meddlesome midwifery; and it is surprising what senseless audacity is frequently exhibited by these progressive obstetricians in publishing to the world the records of their own shame. It was not long since that a practitioner of this school advocated podalic version in natural labor, and reported a large number of cases in proof of its advantages, in several of which the arm or leg was fractured during the necessary manipulations.

It would seem quite impossible that a school of practice, founded on such erroneous principles, and giving such disastrous results, could ever make proselytes. It requires, however, but a slight knowledge of human nature and the peculiar temperament of the present age, to discover that such a code of practice has many elements of popularity. The éclat of an operation is never lost sight of by the ambitious. If the license is given they will never fail to find the opportunity to impress the community with their skill and daring. The tedious waiting at the bedside may also be limited by interference, and the practitioner is liable to consult his convenience rather than the interests of the patient. This has become so common, that people unacquainted with medicine have taken the alarm, and many persons have put a black mark against the name of practising physicians for prematurely proposing a resort to ergot in order to secure a night's rest for themselves.

It may be thought that we have attached too much importance to this subject, but if we regard the interests of the profession, and the cause of humanity, it demands the most serious consideration. In the earnest and eloquent language of a recent author, "It is time that plain language should be spoken on this subject: the spirit of conservative midwifery seems to have been lost in sleep; the ordinances of nature have been disregarded, and the accoucheur with instrument in hand, rampant in his desire for opportunity, rushes with good heart and unmeasured confidence to what he deems the scene of conquest, but too often, alas! it proves a scene of harrowing agony to the unhappy patient." We urge upon the attention of the conservative practitioners of midwifery the necessity of resisting the present tendency of obstetrical practice to operative interference. Let them reinstate, in all its force, as their guiding principle, the old and rational motto, "meddlesome midwifery is bad."

THE WEEK.

We cannot let the remarks of Surgeon W. C. Otterson, U.S.V., in an article published in the issue of the Medical Times for the 21st of March, in reference to certain articles on the supply table, pass uncorrected. He says that but two preparations of iron are furnished, neither of which can be used in certain cases to advantage, specifying the sol. persulphatis and tinct. ferri chloridi. There are on the supply list seven preparations of iron, four of which are allowed in the field. His remarks, also, in reference to the allowance of quinine, are calculated to mislead, as Surgeon Otterson knows, or ought to know, that in cases where that allowance is not sufficient a special requisition will procure all that is necessary. Paragraph I, of Circular No. 12, of 1862, from the Surgeon-General's Office, says: "It is not the design of the Department to confine Medical Officers absolutely to that table (supply) either in *variety* or *quantity*, but only to establish a standard for their guidance in making requisitions for supplies, leaving individual preference to be indulged at the discretion of the Medical Director or Surgeon-General. Neither is it to be supposed that the quantities of the table will always meet the necessities of unusual emergencies, as during epidemics, or in unhealthy seasons and localities, and medical officers who allow their supplies to be exhausted through any such contingencies, without timely notice of their approaching necessities, will be held to a strict accountability."

Prosecutions for alleged malpractice were once very frequent in this country, and the English journals assumed that they were evidence of the low state of the profession. Now, however, such prosecutions have become very frequent in England, and we but rarely hear of them in the United States. In alluding to an approaching trial the British *Medical Journal* very justly remarks:—

> "We do earnestly hope that members of our profession will not be found to enter the witness-box and give evidence affecting the interest and character of one of their profession merely because they are summoned to do so. Heaven forbid that we should interfere with the due course of justice, when any member of our profession renders himself liable to be properly visited by the whips of the law. No; in such case, it would be our duty to assist in bringing the offender to justice. What we enter our strongest protest against is that thoughtless and ready way in which members of our profession are so often found to come forward and assist in the prosecution of a medical brother in distress, however unjust and unwarrantable that prosecution may be. We cannot but feel convinced that it is within the profession itself that we must look for the cause of this frequency with which actions have of late been brought against medical men."

The Albany Journal, in quoting our strictures on the reports of the Proceedings of the State Medical Society, thinks we were too severe on the reporters. The course of the papers of that city proves that we were not sufficiently severe. They seem banded together to disgrace a prominent member of the Society by their bombastic reports of his operations. The last and most ridiculous of all their publications is the appearance of the "grateful patient," in a letter commending the great abilities of his benefactor. It had been supposed that this "grateful patient" died several years ago, on the demise of a certain quack of this city, but it seems that he lives, and is at his old trade. We commiserate the surgeon who is haunted by a "grateful patient."

The records of deaths from procured abortion and by the hands of unrecognised lunatics have filled the news columns of our city papers during the past week. This species of crime is rapidly increasing, and deserves the attention of the Legislature.

Correspondence.

HOSPITAL GANGRENE.

[We are requested to insert the following letter from Dr. Woodward to Prof. Detmold.—Ed.]

Surgeon-General's Office.
Washington City, March 6, 1863.

Dear Sir—In your ninth lecture in the American Medical Times for February 28, 1863, you express the opinion that it is not improbable that hospital gangrene "may have its origin in the rapid generation of a destructive microscopic fungus," and mention that the Surgeon-General had sent me to Annapolis to investigate the histology of this disease. Permit me, therefore, after correcting your statement of the number of cases (there being only between fifty and sixty, and not a hundred and fifty, as stated) to give you the result of examination into the fungus theory. I quote from my report to the Surgeon-General:—

"In conclusion, an allusion may be made to the idea that the peculiar characteristics of this disease are due to the local presence of microscopic fungi. This idea is not borne out by facts. Accurate examination with a high magnifying power, of cases in every stage, both where nothing but an ordinary water-dressing had been employed, as well as in cases in which various forms of antiseptic and caustic washes had been applied, utterly failed to demonstrate any cryptogamic organisms, except the ordinary vibrios, which are to be observed in every decomposing animal substance."

The histology of this interesting affection, as observed, is too large a subject for a letter.

Very respectfully yours,
J. J. Woodward, Ass. Surg. U.S.A.

CASUALTIES AT THE BATTLE OF FREDERICKSBURGH.

8d Brigade, 1st Div., 8d Corps, A.P.
Near Falmouth, Va., Feb. 27, 1863.

[To the Editor of the American Medical Times.]

Sir—I beg leave to send you a few notes, hastily taken at our division hospital (1st Div., 3d Corps), after the battle of Fredericksburgh during my charge, and presented in form of a report, made by order of Orpheus Everts, Surgeon-in-Chief of Division. It is necessarily brief, owing to the multiplicity of other business incident to the occasion.

Amputations of the thigh, Pr. McEvoy, 99 P.V., right, middle third; Pr. Downs, 38 N.Y.V., left, middle third; Major Hawksworth, 99 P. V., left, middle and lower third; Pr. O'Hara, 12 P. R., left, middle third; Pr. Trowbridge, 99 P.V., right, middle third; Pr. Forrester, 99 P.V., left, middle third; Pr. Roack, 99 P.V., right, middle third; total, seven. Amputation of leg, one, Pr. Underwood, 31st Geo., left, lower third. Amputations of upper extremities, Pr. Clark, 99 P.V., right arm, middle third; Pr. Webb, 5th Mich., left arm, middle third; another name illegible, left arm, middle third; total, three. Amputations of fingers, eight; ditto with portions of metacarpal bones, two; total, ten.

Resections.—Upper Extremities.—General Campbell, upper half of right ulna; Pr. Lier, three inches of shaft of left humerus; Pr. Brown, three inches of shaft of right ulna; two others of metacarpal bones; total, five.

Lower Extremities.—Pr. Libby, middle of shaft of left femur.

Several bullets and other missiles were removed by incision or otherwise, from various parts of the body, some from the chest, which had passed through the lungs and lodged posteriorly.

All the amputations were performed before any serious constitutional irritation had been observed; indeed most of them were primary, in this respect, notwithstanding the fact of our being obliged to shift our quarters to three different locations; once, recrossing the river to the opposite bank, then removing from this place back to the vicinity of our camps. This proceeding was, of course, a serious disadvantage, in view of successful operations and ultimate recovery.

All the amputations of the thigh were flap operations, anterior and posterior, one lateral, owing to the wound being situated just where the anterior flap should be.

Amputation of the leg, circular at the junction of the middle and lower third.

Amputations of the humerus, at the middle or junction of the middle and lower third.

Amputations of fingers performed in the ordinary manner.

The resections were remarkably promising cases when they left the hospital, a few days afterwards. The same may be observed of the amputations, which seemed unusually promising, notwithstanding the previous and subsequent removals. Indeed, the general good condition of the patients, with respect to care, comfort, operations, dressing, clothing, and transportation, elicited the warmest acknowledgments from all, even newspaper correspondents, and more especially from the surgeons in charge of the general hospitals to which they were sent.

Of the operators, twelve in number, it would be improper to make invidious mention, where all were equally attentive and careful. I cannot forbear, however, to particularize the efficient services of Drs. Hildreth, 3d Me., Everett, 5th Mich., Lyster, 5th Mich., Jones, Surgeon-in-Chief, 1st Brigade, Howe, 1st N. Y., Herr, 68th P. V., and finally, J. W. Lyman, Surgeon in-Chief, 2d Brigade, my predecessor in charge, to whom was intrusted the transportation of the wounded to Washington, which was accomplished with consummate care and skill, and with entire safety to those concerned. Altogether, the arrangements from the beginning were exceedingly good, notwithstanding the serious disadvantages enumerated. The mortality was unusually small, and confined to the very worst cases. None of those operated on died at the hospital, nor during the transportation subsequently, and as above stated they left in excellent condition and good spirits.

Very respectfully, etc.,
Wm. O'Meagher,
Surgeon-in-Chief, 3d Brig., 1st Div., 3d Corps.

FOREIGN CORRESPONDENCE.

Vienna, Austria, Feb., 1863.

Vienna has one great advantage over many other places for medical instruction, and this is, that the clinics and lecture-rooms are all very near each other, so that no time is lost in going from place to place. In and about the "General Hospital," which has beds for 3,000, and has rarely less than 2,500 patients, all the medical advantages of Vienna may be enjoyed. The two surgical professors of the University (Schuh and Dummreicher) have each two wards, containing about sixty patients, on whose cases they lecture before the class; while there are a number of other wards, the treatment of which is directed by attending surgeons, called here "Primarii," who, however, are not professors, and who give no lectures, and to whose wards the students have no access. I will endeavor more fully to explain the arrangement of the system of instruction as it obtains in the Medical Department of the University here. Surgery, Medicine, Midwifery, Diseases of the Eye and Skin, have each a clinic, consisting generally of two wards, with a lecture-room attached. Each morning the professor makes the first visit in the wards, attended by the house-surgeon or physician, and his assistant, and the students. The new cases are prescribed for, and one or more cases are selected as the basis of a lecture on the disease in question, which lecture may be delivered at the bedside or in the adjoining lecture-room. This is no rambling superficial talk, but as full a one as the didactic lectures of our professors of surgery or medicine. These visits or clinical lectures continue for about two hours. The histories of the cases are prepared by candidates for a degree, it being among the requirements for graduation that a given number of cases in the wards shall be followed by the applicant, and these histories are made the basis in some cases of the professor's remarks. This is the manner in which the student's knowledge of surgery, medicine, midwifery, and ophthalmology, is obtained. In buildings near by the lectures on Pathological Anatomy (Rokitansky) Descriptive and Topographical Anatomy (Hyrtl and Voigt), Physiology, Chemistry, are delivered. The two professors of medicine (Skoda and Oppholze) are extremely well known in America. The latter, who has written no book, a requirement of a professor here, is the more interesting lecturer, and consequently has the greater class. Professor Hebra has a department for skin diseases, which is very well attended, especially by graduates of other schools who are taking a post-graduate course in Vienna. Professor Arlt, one of the conductors of the Archives of Ophthalmology, has a department with about 100 patients, a lecture-room, and a daily clinic, when out-door patients are prescribed for. He gives also a course on the operations on the eye, illustrated with preparations showing a masterly hand. This course, which he gives twice in the same session, each one lasting about six weeks, is especially for those who have a special interest in ophthalmology. In the present class of seventeen, the greater number are other than Germans. Every one has the opportunity to perform each one of the operations several times during the course under the direction of the professor. Arlt has not the genius of Graefe, but he is a fine operator, careful and successful in his treatment. Opties are not so much considered and lectured upon as at Berlin, but more strictly practical instruction is given. Professor Taeger has also a department for diseases of the eye, in which he has about eighty patients. He gives instruction in the use of the ophthalmoscope. His plates illustrating the diseases of the sclerotica, choroid, and retina, have an extended reputation. The present professor is the son of Professor Taeger, one of the most distinguished oculists in Germany, but who is now too old to conduct a clinic.

The midwifery clinic is always well attended by foreigners, on account of the advantages for practice. It is an interesting fact, which may be stated in passing, that more than half of the births in Vienna are illegitimate. The Foundling Hospital, where children are received and "no questions asked," is immediately opposite the General Hospital. The pathological rooms of the hospital, in which Rokitansky holds his lectures and sections, in which also the sections of the various clinics are made, is a model building, beautifully and conveniently fitted up. The dead room has bells which are connected by a wire to the hand of the corpse, so that in case of return to life prompt assistance can be rendered from the next room, where the watchman is. An autopsy is made on each clinical patient who dies, and no such obstacles can be thrown about the efforts of the physicians as at home. Rokitansky, who is now fifty-nine years old, delivers a course of lectures, which are very poorly delivered, consisting of extracts from his works, and are thinly attended, by not more than fifteen to twenty students. As is well known a great many of his theories have been overturned, and Virchow in Berlin, as a pathologist, probably now stands higher. The course of study here is five years, or ten sessions, the number of students and graduates attending the private special instruction not more than 600. There is another school for medical instruction here, having a full faculty of eminent men, which is intended for army surgeons in the emperor's service. There is also a hospital connected with it. Sudoiz, the physiologist, and Stillwaz, the author of a new work on Diseases of the Eye, are distinguished members of this faculty. The advantages for post-graduate study in Vienna are excellent, on the whole better than in Berlin; short and thorough courses, of about six weeks in duration, being given in the various departments of surgical and medical science. The classes number from six to twenty, being limited according to the requirements of the subject.

All the attending surgeons and physicians of the hospitals, with the house surgeons and physicians and their assistants, are paid a fixed salary. The principle that the benefits of the practice should be sufficient emolument is not here recognised as in America.

I should like to speak more at length of the military medical school, called "Josephinum" here, but I reserve it for another time. The hospital is no model for us in a sanitary point of view; the arrangements are far behind ours in many respects. For example, wooden beds are still used, the ventilation is extremely bad, cleanliness is not so generally observed, although a few of the wards are all that could be desired in this respect. The nurses are female, and an unclean race of people of the lower class. The hospital is an irregular sort of quadrangular-shaped two-story-and-a-half building, inclosing several courts, which are laid out with pleasant walks. Fountains or springs in these courts furnish the water for the building.

Medicine stands far ahead of general surgery in Vienna, which fact is due to the eminent men at the head of the latter department. In skin diseases, diseases of the eye, midwifery, and in normal and pathological anatomy, the school takes a first rank.

Yours, etc.,
D. B. St. John Roosa, M.D.

Army Medical Intelligence.

War Department, Adj Gen'l's Office.
Washington, March 25, 1863.

SPECIAL ORDERS, No. 139.

2. Hospital Steward James S. Knox, U.S.A., is hereby honorably discharged the service of the United States, to enable him to accept a clerkship in the War Department.

4. The following assignment is made of Medical Officers:

Assistant Surgeons Francis Greene, J. W. Applegate, F. Hayden, A. C. Benedict, and D. B. Hannan, U.S.V., to report for duty to the General commanding the Department of the South, at Hilton Head, S. C.

Assistant Surgeons J. N. Laing and J. W. Merriam, U.S.V., to report to Surgeon L. A. Edwards, U.S.A., in charge of General Hospital, Portsmouth Grove, R. I.

Assistant Surgeons R. L. Braden, R. W. Pease, and B. B Wilson, U.S.V., to report to the General commanding the Department of the Gulf at New Orleans, La.

Assistant Surgeons Henry Janes and J. J. De Lamater, U.S.V., to report to the Medical Director at Newbern, N. C.

Assistant Surgeons J. B. Morrison and E. F. Bates, U.S.V., to report to the Medical Director at Washington, D. C.

Assistant Surgeons J. D. Johnson and J. H. Peabody, U.S.V., to report to the Medical Director at Baltimore, Md.

Assistant Surgeon S. D. Carpenter, U.S.V., to report to the Commanding Officer at Fort Kearney, Nebraska Territory, to relieve Assistant Surgeon R. H. Silliman, U.S.A. The latter on being relieved to report to the Medical Director at Washington, D. C.

Assistant Surgeon E. W. Thurm and H. B. Buck, U.S.V., to report to the Medical Director of the Army of the Potomac.

Assistant Surgeon Charles Mayo, U S.V., to report to Surgeon Meredith Clymer, U.S.V., for duty, attending sick and wounded officers of Volunteers in the City of Washington, D.C.

Assistant Surgeons W. W. Wythes, S. D. Turney, D. J. Gloninger, C. F. Haynes, and J. W. Mintzer, U.S.V., to report in person to the Medical Director of the Department of the Cumberland, and by letter to the Assistant Surgeon-General at St. Louis, Mo.

Assistant Surgeons J. R. Ludlow, G. R. Weeks, H. P. Mathewson, H. N. Fisher, and M. K. Moxley, U.S.V., to report in person to the Medical Director, Department of the Tennessee, and by letter to the Assistant Surgeon-General at St. Louis.

Assistant Surgeon A. N. Speer, U.S.V., to report to the Medical Director, Department of the Ohio.

6. The leave of absence heretofore granted to Surgeon Samuel B. Morrison, 2d Maine Vols., is hereby extended thirty days.

By order of the Secretary of War.
E D. Townsend,
Assistant Adjutant-General.

The following named regimental Officers, detached on duty at the places set opposite their respective names, will proceed without delay to join their respective regiments in the Army of the Potomac.

Surgeon J. P. P. White, 10th New York Vols., now on duty with 9th Army Corps.

Assistant Surgeon Joseph Carrier, 1st New York Vols., on duty in Hospital at Washington, D. C.

Assistant Surgeon Geo. W. Hoover, 132d Pennsylvania Vols., on duty in Hospital at Washington, D. C.

Original Lectures.

LECTURES ON DISEASES OF THE EYE.

By HENRY D. NOYES, M.D.,

ASSISTANT SURGEON N. Y. EYE INFIRMARY.

LECTURE II.

OPHTHALMIA TARSI—BLEPHARITIS CILIARIS.

It is difficult to give a strictly accurate name to this disease, without resorting to a most uncouth combination of Greek words. In its progress many of the structures of the eyelid may become involved, and I think it better to use the names of ophthalmia tarsi, or blepharitis ciliaris, which indicate the location of the disease, without attempting to designate its precise seat or extent. *Symptoms.*—In its milder form a few crusts appear upon the margin of the lid, entangling a bundle of eyelashes. Sometimes there are no crusts, but the edge of the lid is a little red, tumid; the ciliæ are sparse, and among them furfuraceous scales of epidermis are scattered like dandruff. If there are only a few scabs upon the tarsal border they are usually disregarded, until as they increase and the ciliæ decrease, the eyelid becomes unsightly. If the scabs be picked off, some of the ciliæ will at the same time be plucked out, and an ulcer will be exposed. The disease begins as inflammation of the cuticle of the edge of the lid, which may simply desquamate its epidermis, or suffer ulceration. With ulceration there is also suppuration, and the pus collecting about the base of the ciliæ concretes into scabs. Beneath the scabs ulceration advances. The ciliary follicles become inflamed, the ciliæ loosened, and drop out. The follicles may be obliterated. Inflammation will also penetrate into the contiguous Meibomian follicles, vitiating their secretion, and perhaps occluding their apertures. When long neglected the whole tarsal border suffers ulceration, the hairs perish, and the fibro-cartilage becomes thickened and shrunken. The palpebral conjunctiva also is inflamed, and provokes increased lachrymation. The ulceration may reach outwards upon the external surface of the lids: it may extend along its border in a red stripe, with a glazed and moist surface, and then takes the name of Lippitudo. This is the most offensive stage of ophthalmia tarsi, although not the most mischievous. There will also be chronic conjunctivitis, the edge of the lid is thickened and bald, the lachrymal puncta are everted, and consequently tears overflow the lids. There may ultimately be contraction of the skin, enough to cause ectropium. This completes the picture of these bleared and rheumy eyes. If the disease does not take this direction it results, in old cases, in the production of trichiasis and entropium. The eyelashes turn against the globe, and cause incessant irritation. The cornea becomes inflamed, the surface rough and hazy, and blood-vessels become developed in it. This superficial vascular keratitis may result in complete pannus. This effect of the disease is its great mischief. The ills resulting from ophthalmia tarsi are, or may be, loss of ciliæ, epiphora, lippitudo, and ectropium, trichiasis and entropium, opacity of the cornea, and corresponding impairment of sight.

The cause of the disease is to be found in a scrofulous constitution. The provoking cause may be dust, smoke, keeping late hours, measles, or other exanthemata. The duration of the disease is protracted, and it is prone to relapses. In the advanced periods, when the margin of the lid has been thickened by hypertrophy of the areolar and other tissues, when ulceration has covered the entire border or spread upon the cutaneous surface, when the ciliæ have been destroyed, the case will admit of palliation, but not of complete cure. In its earlier stages it can be cured, and by proper attention held entirely in check.

Treatment.—For that early stage in which there is simply a little redness of the palpebral border, no ulceration or scabs, but a few scales of epidermis and some fatty matter from the sebaceous glands entangled in the ciliæ, mild astringent collyria are most suitable. A weak solution of alum, gr. ij.–iv. ad ℥j., of tannin, gr. v. ad ℥j., or plumbi acetatis, gr. ij.–iv. ad ℥j., may be applied by thin compresses three times daily for fifteen minutes each time. In these cases ointments frequently prove hurtful—even simple cerate may cause unpleasant irritation. When there are ulcers and scabs, the treatment is by ointments. But the indispensable condition of success is, that the ointment be applied to the ulcers and not to the scabs. The first proceeding is to clear away these crusts. To do this is sometimes a work of time and patience, and some pain. They must be softened by washing in tepid water or in an alkaline solution made by putting a teaspoonful of impure carbonate of soda (washing soda) into a half pint of warm water. The crusts may then be removed. If this cannot be done, and they are picked off by the fingers, the ulcers often bleed. A good plan in dispensary practice is to clip off the lashes close to the eyelid with scissors, then detach the crusts, apply the ointment to the denuded surface, and keep the lashes short until the ulcers are healed. If the ulcers are found to be deep, if they are covered, as they often are, by fungous granulations, touch them with a pointed crayon of nitrate of silver. Repeat this application once in two or three days, employing the ointment in the meantime. If there be considerable conjunctivitis associated with the blepharitis ciliaris, use an astringent solution of alum or tannin with such frequency as its severity may require. The ointments to be employed are as follows, named in the order of their intensity:—Zinci oxidi, gr. v.–x., or hydrarg. nitrico oxidi, gr. iij.–viij., or unguent. citrin., gr. iij.–viij., ad unguenti simplicis ℥j. Of these the commonly called red precipitate ointment is most usually employed, and it suffices for most cases A most important caution is, to be sure that it is properly made. The nitric oxyde of mercury is in small and very hard crystals: to reduce them to a fine powder requires long trituration. If they are not so reduced the ointment becomes not merely less effective but absolutely irritating from the mechanical scratching of the little crystals. There is no ointment in pharmacy which requires more careful preparation. Another vehicle for ophthalmic ointments, which has lately been introduced by Prof. Graefe, is a mixture of glycerine and starch, in the proportion of one part to five. Glycerine is a better solvent than fat, and the mixture is therefore more active—the quantity of medicinal ingredient will be less. The advantage of the mixture is, that it does not become rancid. The ointments thus made should be applied by a camel's hair pencil to the ulcers, two or three times daily—often enough to keep their surface moist and free of scabs.

When ulceration has advanced to the state of lippitudo it admits only of palliation. The accompanying epiphora is often caused by eversion of the puncta lachrymalia. This may be remedied by laying open the canaliculus up to the caruncle, so as to let the tears get entrance to the excretory passages. The ulcerated margin of the lid should be touched occasionally with a crayon of nitrate of silver, and smeared with the above mentioned ointments. An astringent wash will also be often needed. The thickening of the lid and the loss of ciliæ cannot be remedied.

In no case is it wise to give up local treatment as soon as the ulcers are healed; the stimulating ointment should still be used at night until the tissues become quite well and hardy. Neither is constitutional treatment to be omitted Most of these patients will be benefited by cod-liver oil, by iron and other tonics. Their hygeine should be carefully regulated in warm clothing next the skin, in frequent ablutions, in the choice of nutritive, easily digested food, in exercise and fresh air. Many of such patients, especially if attending school, or if adults, will need special caution against reading at night, against exposure to dust and smoke. Often it will be useful for them to wear light blue glasses when exposed to gas or other bright light. They must be advised that they must always use their eyes with prudence, as the indispensable condition of comfort.

The treatment for entropium, trichiasis, and keratitis, will be given in the proper place.

Hordeolum; Stye—The Meibomian follicles become the seat of acute inflammation, often leading to abcess. In ophthalmia tarsi their secretion is vitiated, they become inflamed and even obliterated. The eyelid may be otherwise healthy and yet be the seat of a stye. Persons who habitually have congestion of the palpebral conjunctiva, are most liable to styes. Such an acute inflammation begins with stiffness of the lid, swelling, œdema, and a livid redness of its border. The symptoms soon concentrate upon a certain point, which becomes elevated, hard, and more red. While suppuration is taking place, and seeking room to expand, there is often severe pain, the eye waters, light is disagreeable, reading quite uncomfortable. The abscess is slow in opening, because it must make its way through the dense structure of the fibro-cartilege. The resistance this opposes is the reason of the severe pain. Spontaneous opening may occur through either the internal or external surface, but not until after five or ten days. It is better to open the abscess as soon as matter may be judged to have formed, that is, when the tumor is distinct and becoming acuminated. At an earlier period, fomentations with warm compresses are most grateful. Warm infusion of opium may be used. A small poultice of rice-flour and milk may be applied for twenty minutes several times daily. These measures soothe pain and promote suppuration. When the stye is opened it speedily gets well. Hordeola are apt to come in series. To prevent recurrence, a mild astringent collyrium may be prescribed, and tonics administered. The cold douche is useful; quinine, with or without a preparation of iron, is of advantage.

Cystic Tumors.—These form in consequence of occlusion of the orifice of a Meibomian follicle. The gland becomes expanded into a sac, its lining membrane thickened, its secretion diluted. The process takes place slowly, and more than one tumor may form. I have seen all the eyelids affected with such tumors at the same time. I have seen one form in a child six months old. The cyst, when it reaches a certain size, becomes burdensome to the lid, and sets up a local conjunctivitis. Usually no pain attends its development, and the external skin is supple and not discolored. Upon the conjunctival surface the mucous membrane is reddened, and the cyst may be ready to burst through. Sometimes a mass of granulations will spring up around this opening. Treatment consists in an operation. When small they may be cut into, the contents squeezed out, the interior irritated with forceps. A little inflammation is then set up which destroys the lining membrane, or obliterates its cavity. A small kernel remains, which is gradually absorbed. If the tumor be more voluminous it may be dissected out. The easiest mode is by an incision through the skin and orbicularis parallel to the border of the lid. The dissection is much facilitated by clamping the lid between the blades of Desmarres' ring forceps, or the forceps devised by Dr. Snellen of Utrecht; both working upon the same principle. A broad flat blade is inserted under the lid; the external blade consisting of a ring or bow which encircles the tumor; the blades are held in close apposition by a screw and nut; the under blade serves as a spatula, the outer blade stops circulation in the vessels. After the first cut no more bleeding occurs if the screw be tight enough; the eyelid is perfectly under command. The cyst may be easily isolated until its base is reached, when it usually adheres so closely to the tissues, that the scalpel will cut through the conjunctivæ. It is better then to cut off the cyst with scissors or the scalpel, and what remains may be touched with nitrate of silver. When the ring forceps are removed the bleeding begins, but soon ceases; the wound needs no sutures: no cicatrix will be visible, because hidden by the folds of the skin.

Some prefer to do the operation from the conjunctival surface to avoid alleged deformity from wounding the skin. The objection is not valid, and the operation is more troublesome. After-treatment consists in bathing the lid occasionally with cold water. The small swelling which remains is gradually absorbed.

Trichiasis and *Distichiasis.*—These names signify the inversion of one or more ciliæ upon the eyeball without accompanying deformity of the lid. In trichiasis only a few ciliæ have taken such a misdirection. In distichiasis a whole row upon the posterior border of the lid point against the globe. Trichiasis results from chronic inflammation in the tarsal cartilage twisting the follicles, and giving to the hairs a perverted direction. In distichiasis the rank of offending ciliæ is so distinct from the normal eyelashes, that they have been considered by many to spring from newly developed follicles. Others maintain that they are not a new growth, but simply a distortion of pre-existing follicles It seems to me easier to believe the hairs to be a new growth than that such an accurate selection should occur among the ciliæ: the posterior row assuming a vicious direction, while those in front and contiguous to them remain normal. The hairs are often extremely fine and almost colorless; however attenuated, they cause much trouble. The fretting of the conjunctiva annoys the patient, but upon the cornea their effect is often deplorable. Keratitis ensues, with vascularity and haziness of the cornea, which may permanently impair sight.

Treatment.—For trichiasis the hairs may from time to time be pulled out with ciliary forceps. The blades of these forceps are broad, flat, and must be accurately ground to each other. It is very annoying to use a pair which will hold a hair at only a single point. Evulsion of the ciliæ must be repeated every three or four weeks as the hair grows out. It is better to cure the evil effectually by destroying the hair-bulbs. In doing this the ring forceps may be used. The bulbs may be destroyed by piercing them with a red-hot needle; by exposing them to an incision made upon them vertically, and touching them with a drop of nitric acid, or with lunar caustic. These proceedings induce considerable inflammation, and neighboring follicles share in the destruction. This may be avoided by dissecting out the group of perverted follicles. The skin and orbicularis may be raised off the cartilage, and the bulbs be included in a wedge-shaped piece taken out of it. A more extensive operation is required for *distichiasis.*

Efforts are sometimes made to change the direction of the lashes by cutting out a fold of skin from the lid; but such attempts are generally fruitless. There may be temporary relief, but the trouble comes back again in a short time. The real question to be decided is—Whether a part of the ciliæ must be destroyed, or whether they must all be sacrificed? The ill-effects of protracted distichiasis upon the cornea are too severe to admit of temporizing treatment. Especially is this true among the poor, who suffer most from such diseases, and to whom loss of time is often an evil only inferior to loss of sight. To remove only the row of inverted ciliæ, seize the eyelid in the grasp of Snellen's forceps, and carry the point of a small scalpel or cataract-knife along the upturned tarsal edge from the external to the internal angle, between the line of inverted and of normally directed ciliæ. Some care is necessary to split the fibro-cartilage into two layers, keeping all the morbid follicles on one side and all the natural ones on the other. When the incision has gone to the depth of one-quarter of an inch, cut off the posterior lamina with scissors. No dressing is needed except cold water. Some of the lashes intended to be left may fall out after the operation, but many will be retained. If a dissection cannot be made in this manner, because of irregularity in the inversion of the ciliæ, all of the follicles should be cut away. This operation will be described hereafter.

Dr. Savignac speaks in high terms of praise of chlorine preparations as applications in cases of chilblains—chlorine-water; or of the dry powder of chloruret of sodium to ulcerated chilblains.—*Brit. Med. Jour.*

Original Communications.

CARIES OF THE INTERNAL EAR.

SEQUESTRUM, INCLUDING SEMICIRCULAR CANALS AND COCHLEA, PARALYSIS OF CORRESPONDING PORTIO-DURA OF THE SEVENTH PAIR.

By C. R. AGNEW, M.D.,
SURGEON, NEW YORK EYE INFIRMARY, ETC.

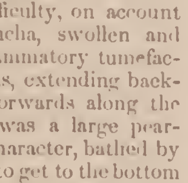
The following case is sufficiently rare and interesting to justify my contributing it through the medium of your Journal to the annals of aural surgery.

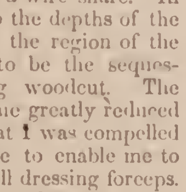
W. C., æt. 38, had suffered from otorrhœa from the right ear for the greater part of thirty-two years. The origin of the disease was obscure, the patient rather vaguely attributing it to a fall. Considerable sense of hearing remained until three years before the case came under my observation, at which time an exacerbation of the aural inflammation, accompanied by prolonged and excessive pain deep in the ear and through the neighboring parts of the head, terminated in total loss of hearing in the affected organ, and paralysis of the corresponding portio-dura of the seventh pair. Several times during the progress of the disease, granulations sprouting from the depths of the external ear outcropped at the meatus, and were removed by torsion.

The patient came under my observation for the first time on the 16th of April, 1862, presenting evidences of great suffering and debility. He had suffered greatly for months from gnawing pain in the ear and head, insomnia, loss of appetite, and dizziness. An examination of the diseased ear was effected with great difficulty, on account of its excessive tenderness. The concha, swollen and inflamed, was elevated by a dense inflammatory tumefaction circumscribing the external meatus, extending backwards over the mastoid process, and forwards along the zygoma. Projecting from the meatus was a large pear-shaped "polypus" of a dense fibrinous character, bathed by a constant flow of stinking pus. Desiring to get to the bottom of the case I placed the patient under chloroform, and removed the polypoid mass by means of a wire snare. In attempting to push the wire snare into the depths of the meatus I encountered a solid obstacle in the region of the middle ear, which subsequently proved to be the sequestrum, represented by the accompanying woodcut. The calibre of the external meatus had become greatly reduced by boggy swelling of its soft parts, so that I was compelled to make as free an incision as possible to enable me to reach the sequestrum with a pair of small dressing forceps. Having got the body in the grasp of the forceps a slight rocking motion with traction enabled me to extract it.

It will be observed that the sequestrum includes the wreck of the labyrinth. The cochlea is shown, laid open by caries, and two of the semicircular canals are seen in part. The loss of hearing and the paralysis of the seventh pair were explained.

Two views in fac simile are given of the sequestrum in the wood cut, and an attempt has been made by the artist to represent the eroded appearances.





The remains of the anterior semicircular canal are indicated by the letter C, the cochlea B, opened by caries, shows the lamina spiralis. The vestibule, A, D, is bereft of its furniture, and almost obliterated by the disintegration. All vestiges of the blood-vessels and nerves of the parts had vanished, and nature had been exercising her power in pushing the useless machinery into the external world. After the operation the patient rapidly regained his health, the discharge from the meatus ceased, and by the 3d of January, 1863, the external meatus had become entirely closed by cicatrization. The paralysis of the portio-dura still remains. The wonder in this case is, how such inflammatory ravages could occur in the internal ear without fatal brain disease. Many points in the history of the case make it probable that inflammation had reached the meninges of the brain, and smouldered in readiness to assume the gravest proportions and activity.

The cochlea and semicircular canals do not show well in the engraving.

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DIFFICULT OBSTETRICAL CASES.

By GEORGE T. ELLIOT, Jr., M.D.
PROFESSOR OF OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN IN THE BELLEVUE HOSPITAL MEDICAL COLLEGE—OBSTETRIC PHYSICIAN TO BELLEVUE HOSPITAL AND THE LYING-IN ASYLUM.

(*Concluded from page 159.*)

Case CII.—*Right mento-iliac Presentation—Death of Child—Craniotomy—Bellevue Hospital, Dr. Wm. T. Nealis, House Physician.*

"Rosanna Sexton, native of Ireland, æt. 25 years, first pregnancy, has always been a healthy woman, menstruated for first time at 15 years of age. Was married at the age of 23. Was admitted to the waiting ward on the 15th of September, 1862.

She was brought to the lying-in ward at 11 P.M. of the 21st of October. She says she had been suffering from pains in her back since the 19th inst. As the pains seemed to be ineffectual, gtts. xx. of McMunn's Elixir were administered, which produced a comfortable sleep during the night. During the 22d of October the pains were at long intervals, and of no great force, the os uteri being only slightly dilated, and the head being the presenting part. At 9 P.M. of the 22d gtt. v. of Magendie's solution of morphia were administered, which allowed her to sleep comfortably. During the 23d of October the pains came on at shorter intervals and with greater force. The membranes ruptured at noon. At half past one P.M., she was seen by Dr. George T. Elliot, who said the presentation was facial (right mento-iliac), and also that the child was dead, there being no fœtal heart sound, and no suction when his finger was placed in the child's mouth. He ordered ʒj. tinct. ergotæ, which acted very speedily, producing powerful pains, but there was no advance of the head, the chin remaining in the same position when Dr. Elliot saw the patient seven hours after the drug had been given to her. He sent immediately for Dr. Isaac E. Taylor. They concluded to perforate the cranium, which was done by Dr. Elliot. Chloroform having been given to the patient by Dr. E. L. Mola, Dr. Thomas's perforator was introduced into the right temple close to the orbit. The placenta was removed from the uterus two hours after the delivery of the child, there having been no pains in the meantime, although ℥ss. of tinct. ergotæ was given. The uterus rapidly and firmly contracted, and no hæmorrhage ensued. On the nineteenth day after delivery the patient left the hospital perfectly well."

Case CIII.—*Brow and Face Presentation.—Powerless Labor with Band of Circular Contracted Uterine Fibres.—Lever.—Forceps.—Partial Version.—Perforator.—Lying-in Asylum.—Dr. Sterling, Resident Physician.*

Mary Mack, second pregnancy, twenty-seven years old, fell in labor on Friday night, December 5th, 1862. There had been some difficulty in her first labor. The doctor recognised a vertex presentation. Pains feeble and unsatisfactory, and her condition so feeble as to require stimulants. I was called to her on the 7th at noon. At that time she was weak, listless, and much fatigued, with no labor pains of value. Fœtal heart feeble, but heard with some difficulty on the left side. Vaginal examination showed that the membranes were ruptured, and that there was much admixture of meconium with the liquor amnii, which latter seemed to have nearly all escaped. The anterior fontanelle could be reached high up on the left side near the acetabulum. The brow was the most depending part, but the nose, mouth, and chin, could be felt, the latter being directed towards the right sacro-iliac synchondrosis.

The presenting parts were just within the brim, and readily movable; I therefore determined to endeavor to bring down the posterior fontanelle. This was effected by the aid of one blade of the forceps, used as a lever, but when the instrument was removed the brow and face tended to resume their original position. This led to an exploration with the object of determining whether an arm or other presenting part prevented the chin from remaining flexed. No such obstacles existed. The funis, however, was then distinctly reached within the cervix uteri, not prolapsed, not recognisably pressed upon, but the pulsations were feeble, and by the watch amounted to 62 in the minute. It becoming therefore imperative that the labor should be promptly terminated, I explored still further, and recognised that the promontory was unduly sharp, and more projecting than normal, though no diameter in the brim or elsewhere offered any impediment to the labor. Nor, indeed, could the head be said to have yet engaged in the brim. Further up there existed a band of circular uterine fibres, unduly and tonically contracted, the contraction not bearing any relation to the degree of contraction in the other uterine fibres. Here seems to me to have been the key to the position; for, as I have seen in similar cases, the circular constriction prevents alike the weight of the child from aiding its descent after the waters are evacuated, and prevents the uterine contractions from being regularly transmitted through the spinal column to the fœtal head; thus such result being prevented, the long arm of the lever, or that passing from the plane of the spine to the frontal bone, is no longer pressed upwards, flexion of the chin on the breast no longer follows, and the head, swinging at the brim of the pelvis, is left free to the other influences which, in such a state of things, would invite descent of the forehead, just as would happen if a still-born child were held up by its heels after birth.

This state of things,—the peculiar character of the labor, and the feeble funis-beats—called for prompt relief. Having then reapplied one blade of the forceps, and again brought about and maintained flexion of the chin on the breast, I applied both blades, and locked them. The instrument was thus readily applied above the brim, in the oblique diameter, running from the left sac. il. syn. to the right acetab. When tractions were forcibly made, however, the head pivoted again, so as to resume its original position. For this I was quite prepared, as I had met the same difficulty before in just such a case, and making no further infructuous efforts I withdrew the instrument, and attempted version. No great difficulty was experienced in bringing down both feet, one to the vulva, and one just within. But the difficulty was of course to come, viz. to push up the head through the circular constriction. Before proceeding to that manœuvre I felt again for the funis—which had not prolapsed—and found it pulseless. This fact being also recognised by Dr. Sterling, obviated the necessity for continuing an operation which could not benefit the child, and so having pushed back the feet, and requested Dr. S. to maintain the head fixed at the pelvic brim by pressure through the abdominal wall, I perforated the fœtal skull with Blot's instrument, and with strong and somewhat continued effort withdrew the child by the aid of Churchill's crotchet. After the head was withdrawn time was allowed for the uterus to contract, and aid in expelling the body, but it remained sluggish, and after some time the placenta was withdrawn from its usual site, viz. hanging over the anterior cervical lip. Contraction was maintained for some time by the hand before the binder was applied, and by the aid of ergot and brandy there was no hæmorrhage, and the patient did perfectly well. Chloroform.

Dr. Joret recommends the following way of administering croton oil internally. A drop of the oil is dropped upon a piece of sugar, which is then pulverized and mixed with a certain quantity of starch. The mixture is then divided into six or eight powders.—*Brit. Jour.*

A REPORT OF TWELVE
GUNSHOT FRACTURES OF THE THIGH,

TREATED CONSERVATIVELY IN THE U. S. ARMY GENERAL HOSPITAL, "NATIONAL," CAMDEN STREET, BALTIMORE, MD.,

READ BEFORE THE U. S. ARMY MEDICAL AND SURGICAL SOCIETY OF MARYLAND.

By EDMUND G. WATERS, M.D.,

ACTING ASSISTANT SURGEON U.S.A.

(*Concluded from page* 172.)

IV.—Serg. A. Frank B. Chase, Co. K, 14th Regt. N. Y. Vols., native of Hillsdale, N. Y., single, æt. 25, lawyer, fifteen months in service before wound was received; constitution excellent. Admitted July 25, 1862. Was wounded in the battle of Malvern Hill, July 1, by a round musket ball while marching across the enemy's fire. There was no bleeding to speak of at the time of injury or subsequently. In half an hour after he was shot he was placed upon a window blind, and carried three-quarters of a mile to the rear. The ball entered the inside of the left thigh, middle third, seven inches above the condyle of femur, passed transversely through, fracturing the bone, and lodging about an inch from the external surface. The probe failed to reveal the situation of the ball at this time, and though searched for it could not be discovered. He lay upon the shutter, in the place where he was first conveyed, for twenty-four hours, the limb being supported by blankets, and was carried thence to a barn upon a stretcher. July 6.—The limb was put in proper position and a straight splint was adapted to it, from the lower extremity of which no extension was made. July 8.—He was conveyed to Richmond in a pedlar's wagon over an exceedingly rough road, and lodged in the Libby prison. There he remained fourteen days, with insufficient diet and little or no surgical attendance, being carried once in the interval to the depot a mile and a half distant for shipment north, but was obliged to return in consequence of the crowded condition of the cars. July 22.—He was again carried to the depot and put aboard a freight car. From thence, changing cars at Petersburg, he was conveyed to City Point and shipped aboard a steamer for Baltimore. The splint was kept on until his arrival in this city. Union being then ascertained to have taken place it was removed, and one of pasteboard substituted. Sept. 1.—The tumefaction at the point of fracture has been hitherto so great as not to admit of efforts to discover the ball. The swelling having by this time subsided, however, the patient was able to ascertain its locality and indicate it to the surgeon. An incision an inch deep revealed the missile lying in the sac of a small abscess created by its own presence, where it was easily seized and removed. The discharges from the orifice of entrance had continued up to this event, when they ceased altogether. Some discharge from the point from which the bullet was removed was maintained, however, for several days thereafter. Oct. 1.—All discharge has ceased. The position of the foot and leg is perfect, with no observable local deformity: there is shortening of only one inch and a quarter. The patient moves about with facility on crutches, and can hardly be convinced that the wounded limb is not the longer of the two. Oct. 11, 1862.—Discharged from the service, and left the hospital on his return home.

V.—Silas M. Gifford, Co. I, 83d Regt. Penn. Vols, æt. 21, born in North East, Erie Co. Penn., farmer, of bilious temperament. Was wounded at the battle of Malvern Hill, July 1, 1862, at seven o'clock P.M., while on his knees facing the enemy. He lay on the field all night, receiving no attention, and was then carried off on a piece of tent to a house about fifty rods from the place where he was wounded. He stayed here five days, with absolutely nothing to eat, and under no surgical care whatever, being supported only by some brandy kindly administered by the Confederate officers. July 6.—He was carried to Richmond in a pedlar's wagon, a distance of some eighteen miles, the road being in places very rough. There he was confined in the Libby prison until July 22, when he was put in the cars for conveyance to City Point, some thirty miles off, changing once at Petersburg. There he was shipped aboard a steamer for Baltimore, where he arrived July 25, and was admitted into the National Hospital on the same day. His condition was favorable on admission. He speaks of having received no professional attention while in Richmond, no splint, up to the time of his arrival in this city, having been used with his wounded limb. A musket ball, supposed by surgeons in Richmond to have been a small round ball, entered the outside of the left thigh about twelve inches above the knee-joint, and, passing upwards, inwards, and forwards, fractured the femur in its upper third, and emerged anteriorly two inches below Poupart's ligament, and half an inch external to the femoral artery. Aug. 5.—The leg was placed in the anterior splint, union not having taken place, and treated at the point of fracture with cold water dressing. Aug. 10.—The patient was attacked with bilious remittent fever, which complicated the treatment, and for a few days imperilled his life. Sept. 17.—The leg was taken out of the splint, union being firm. Oct. 1.—The discharge from both orifices has continued up to date from the period when suppuration first occurred. Oct. 18.—The discharge has entirely ceased for some two weeks back. The patient experiences occasionally some pain in the left foot, often quite severe, but in other respects represents himself as very comfortable. His complexion is good, his spirits cheerful, and he is daily and rapidly approaching a normal standard in flesh and general healthfulness. There is much local deformity at the point of fracture, the limb being very convex on its outer surface, and the callus profuse. The foot is everted, but may be turned inwards without pain, and with trifling effort, at the will of the patient. Shortening amounts to two and three-quarter inches; union perfect. The patient has been moving about on crutches since Sept. 25th, and his facility of movement by their aid is increasing daily. He bears the weight of his body upon the injured leg without inconvenience. Nov. 16, 1862.—Cured and discharged the service and the hospital.

VI.—Serg. Wm. H. Terpening, Co. F, 4th Regt. Mich. Vols. infantry, native of Michigan, single, aged 22, clerk, of good constitution, was wounded July 1st at the battle of Malvern Hill, while advancing, by a round musket ball. He received no treatment on the field, but about two hours after the wound was experienced he was carried on two muskets to a farmhouse, about a mile and a half to the rear. Four days subsequently a straight splint was applied to the limb, which was fastened securely to the thigh above the point of fracture, and projected several inches beyond the foot. From the lower extremity of the apparatus extension was made by means of adhesive strips passed around the ankle. July 8.—He was carried to Richmond in a pedlar's wagon a distance of fifteen miles. He remained fourteen days in Richmond, confined in the Libby prison, where the wound was washed twice a day by the nurses, and the extension was increased once. His diet was meagre during his confinement, consisting for the most part of a thin gruel made of black-eyed peas, with meat three times a week. There was but little hæmorrhage at any time, and, notwithstanding the roughness of the travel, he experienced no pain to distress him after the night of the day upon which he was shot. 19th.—He was taken to the depot, perhaps a mile and a half from the prison, but the cars being already full upon his arrival he was obliged to return. 25th.—He was again carried to the depot to be sent north, and was put aboard a freight car, from thence changing cars at Petersburg, he was taken to City Point, and from there to Baltimore by steamer. Admitted into the National Hospital July 25, 1862. His condition at that time was reasonably good. The missile entered the outside of the right thigh two inches above the knee-joint, comminuted the femur at its lower third, and, passing out posteriorly at a point one inch higher up the limb than that of entrance, was found split into two pieces in the stocking of the same leg. 27th.—The anterior splint was applied. Water dressings were used locally for several weeks, and tonics with stimulants were exhibited to support the general system. Sept 13.—The splint was taken off, the discharge from both orifices continuing up to date. Oct. 1.—The discharge has entirely ceased, and both orifices of the wound are healed. No deformity in the contour of the limb is noticeable, its position is perfect, and the shortening amounts to only one inch and a half. The patient moves with facility on crutches, and daily spends most of his time out of doors. Oct. 16.—Discharged the service cured, and left the hospital on his return home.

VII.—Thos. Murphy, private, Co. D, 19th Regt. Mass. Vols., aged 19, native of Boston, Mass., coppersmith by trade, of sanguine temperament, was wounded at the battle of Malvern Hill, July 1st, 1862, while advancing. He remained four days on the field after being wounded, and was then carried on a door about four miles to a hospital tent, but in consequence of its being crowded he was obliged to remain outside exposed to the weather for eleven days, with no covering or protection of any kind. He was then carried in a spring-wagon to Savage's Station, ten miles of distance. He remained there between nine and fourteen days, and was then conveyed to Richmond in the cars. He was there confined in a canal warehouse at the depot, stayed three days without surgical attendance, and was then taken in an ambulance to City Point, a distance of twelve miles, and shipped aboard a steamer for Baltimore. Admitted into the National Hospital July 21, his condition being moderately good at the time. The bullet, supposed by the patient to have been a round one, entered the inner surface of the left thigh two and a half inches above the knee-joint, passed upwards and backwards, fracturing the bone in its lower third, and emerged posteriorly in the median line, six inches above the point of entrance. Prior to his admission here no apparatus had been applied to the limb, but on July 24th the anterior suspensory splint was adapted, union then not having taken place. The wound at this time had healed, but subsequently opened again about July 30th, and continued to discharge from both orifices up to Oct. 1st. Oct. 20.—The thigh is quite concave in front and convex behind, with antero-posterior overlapping. The discharge has entirely ceased now two weeks or more, and union is perfect, with no superabundance of callus. The end of the inferior extremity may easily be felt through the integuments and muscles projecting behind that of the superior. There is shortening of only one inch and a quarter, and the position of the leg and foot is natural. Some swelling of the knee-joint is observable, attributable, doubtless, to proximity of the point of fracture; but there is neither heat nor redness, and the limb may be freely moved in any position or direction without causing pain. The patient goes out daily on crutches, and the limb promises to prove as useful as ever. Nov. 1, 1862.—Discharged the service, and left for his home, cured.

VIII.—Lieut. Chas H. Hawkins, Co. C, 4th Regt. N. Y. Cavalry, 23 years old, native of N. Y. city, regular soldier for three years prior to enlistment, and subsequently a conductor on a city passenger railway, of nervo-sanguine temperament, was wounded while reconnoitring a mile and a half from Strasburg, June 1st, 1862, at eleven o'clock P. M. He lay out all night in the rain, and the next day in the sun, until three o'clock P. M., when the ball was extracted by his regimental surgeon. He was then carried in an ambulance to the hospital in Strasburg, and lay eight or nine days without any treatment. A straight splint was then applied to the outer side of the thigh, with extension and counter-extension. He was then removed on a stretcher to a private house, remaining there seventeen days under surgical treatment, during which time two pieces of bone came out. He was then removed in an ambulance to a tent hospital, about five miles distant, near Middletown, staying there nine days, during which time he was examined by two brigade surgeons with a view to amputation, but union having taken place the idea was abandoned. After this he was removed to a hospital in Winchester in an ambulance, a distance of twelve or fourteen miles. He stayed there nine days, during which time the surgeon removed the splints and applied a bandage from the knee up to the wound. He was taken to the Union Hotel hospital in an ambulance, staying there forty-eight hours, at the expiration of which time he was put on the cars and brought to Baltimore, being twenty-three hours on the journey. He was admitted into the National Hospital July 20th. There was no splint used subsequent to admission, the limb being sustained in an easy position by pillows. His condition was one of great exhaustion at this time. The wound was received while the patient was standing erect in the stirrups. The bullet, from one of Colt's cavalry pistols, entered the posterior aspect of the right thigh, six inches below the great trochanter, passed downwards and forwards, fracturing the femur at its middle third, and lodged under the integuments in the anterior median line, five inches above the knee-joint. Oct. 1.—The patient was taken to the operating-room for resection, and a number of denuded fragments of bone were removed from the posterior orifice of the wound. Oct. 20.—The discharge continues from the posterior orifice, there having been no cessation of it from that locality since suppuration first commenced. The union is, however, quite perfect, with antero-posterior overlapping. The position of the leg and foot is natural, the limb admitting of being moved in any direction without discomfort to the patient. The shortening amounts to three inches. His general condition is good, and he is improving daily. Feb. 20, 1863.—The patient's condition continues as favorable as could be desired; several small sequestra were removed through the posterior orifice some two weeks since, and examination by the finger at that time revealed no exposed bone. A limited portion of the canal into which the finger readily passed, was lined with a peculiar membrane which gave the impression of healthy firmness to the touch. The discharge is rapidly diminishing, and there is every reason to anticipate a speedy recovery.

IX.—Private Wm. C. Lafeore, Co. B, 63d Regt. Penn. Vols., 22 years old, native of Deer Creek, Penn., unmarried, of nervo-sanguine temperament, was wounded at the battle of Fair Oaks, May 31, 1862, while resting on one knee loading his gun. He lay on the field for two days without treatment, and was then taken to the General's headquarters, where his wound was dressed and a splint applied. He was then put on the cars and taken to Richmond, being one day on the road. On his arrival in that city he was placed in a tobacco warehouse, receiving no attention for two days, when his wound was again dressed with a bandage and cold water, this application being continued for seven weeks. He was then forwarded to City Point by cars, and thence to Baltimore by steamer, being three days and a half on the journey. He was admitted into the National Hospital July 25, his condition at that time being much enfeebled; union had taken place, the discharge continuing moderately abundant. Aug. 1.—His leg was put into the anterior splint, and continued suspended until Aug. 28. A minié bullet from an Austrian rifle had entered the anterior aspect of the right thigh six inches above the knee-joint, passed upwards and backwards, fracturing the femur at its middle third, and emerged posteriorly in the median line about eight inches below the acetabulum. Oct. 20.—The discharge still continues in small quantity from both orifices, its permanency probably being induced in some measure by a severe attack of erysipelas, from which the patient has suffered since his admission. The union is very perfect, with superabundance of callus. The position of the leg and foot is natural. Shortening amounts to three inches. The patient is cheerful, and his condition is improving daily. Feb. 17, 1863.—This patient has been moving about with incredible agility for some six weeks, while awaiting his discharge from the service. He complains of no neuralgia or other inconvenience in the injured limb or elsewhere, his general health is excellent, and in all his movements seems not to be aware that he has experienced any accident whatever. Feb. 23.—Discharged the service, and left the hospital on his return home.

X.—James McKeough, Private, Co. K, 10th Penn. R. C., æt. 45, laborer, native of Ireland, of nervo-sanguine temperament, was wounded in the seven days' fight, at the battle of Gaines' Mill, June 27, 1862. He received no treatment on the field, save that his wounded leg was supported on a wisp of straw as he was being borne off to a field-hospital on a stretcher. He was subsequently removed to Savage's Station, whence he was taken to Richmond in the cars. He remained in that city some three weeks, being much of the time exposed to the weather while lying upon a stretcher in the public streets, and receiving almost no professional treatment. While in this exposed situation vermin attacked his wound, thereby adding much to his solicitude and distress. He was then forwarded North by the way of Petersburg, changing cars at that city, and from City Point to Baltimore by steamer. Admitted July 21, 1862. A musket bullet entered the outer surface of the left thigh, about three inches below the great trochanter, traversed the limb horizontally, shattering the bone at its upper third, and emerged internally nearly opposite the point of entrance. Several fragments of bone were removed at various times. Union had taken place on his admission, but some days subsequently the limb was swung in the anterior splint. There was considerable lateral angularity in this case, as is generally observed in compound fractures of the femur at its upper third. The callus was abundant, and the shortening amounted to two inches and a half. He walked about the streets, supported only by a stick, for some weeks prior to his discharge, complaining of no inconvenience beyond that arising from the unequal length of the limbs. Oct. 11, 1862.—Discharged the service, and left the hospital on his return home. It is to be regretted that this patient was discharged from the hospital without all the details of his case being secured for report. Some of the preceding facts of least importance were kindly furnished from memory by the surgeon in attendance upon the case, and all of them may be relied on for substantial accuracy.

XI.—Capt. Wm. H. Bugh, Co. G, 5th Wisconsin Regt., aged 35 years, bilious temperament, lawyer, was wounded in the battle of Williamsburg, May 5, 1862, while leading a charge. After lying for several hours on the field of battle he was placed on board a transport in the York river, and forwarded to Baltimore. Admitted into the National Hospital May 8, 1862, five days after the receipt of the injury. On examination a bullet wound was discovered in the right groin, about three inches below and external to a line drawn perpendicularly from the anterior superior spinous process of the ilium. Posteriorly another wound was discovered in the sulcus formed by the junction of the buttock with the thigh of the same side, evidently produced by the same missile. The bullet, presumed by him to be a minié, entered anteriorly, and, passing slightly downwards, traversed the line of union between the thigh and trunk, fracturing the neck of the bone in its transit, and emerged behind at the point first indicated. At the first moment of examination the femur was not presumed to be fractured, as there was no manifest shortening. As the patient complained of much pain, however, it was deemed advisable to swing the limb in the anterior splint, partly with a view to obtain advantages for dressing the wound, and for the comfort of the patient as well as a measure of precaution. In the movements of the limb requisite for the adaptation of the splint, crepitus was plainly distinguishable. Fracture was now known to be present, and the splint was continued for two months, to the great relief and comfort of the patient. Convalescence was not interrupted by a single untoward accident, the pain experienced requiring only occasional anodynes in small quantities for its alleviation, and the treatment was not more embarrassed than ordinarily occurs in civil practice after simple fractures of the femur at any part of the shaft. After remaining under treatment in the hospital about two months, union was found sufficiently firm to admit of his removal to a private house, where he hoped to secure greater quiet and privacy. Mensuration, two weeks subsequent to his removal, revealed shortening of one inch and a half. Two months subsequently this gentleman visited Washington, and succeeded in obtaining the position of recruiting officer with the rank of Lieut. Colonel, upon which he left for his home in the far West to enter upon the duties of his new position. He frequently remarked to the writer during his attendance upon him, that he awaited impatiently his complete recovery in order to accept a commission in the cavalry service, and was altogether unwilling to believe the assurance that he would find himself unequal to active military duty in the field. So rapid was his recovery, and so uncomplicated by accident, that he conceived himself habitually to be suffering from a very ordinary injury, rather than from one reckoned among the gravest to which a soldier is liable, and from which the father of military surgery assures us, in his "Commentaries on the Surgery of War," he has never known an individual to recover, or even to survive the infliction of it more than two or three months.

XII.—Wallace Derrick, Private, Co. A, 44th Georgia Regt., 17 years of age, sanguine temperament, farmer, was wounded at the battle of Antietam, Sept. 17, 1862. He was carried almost at once to the rear in an ambulance, stopping in a barn, where his limb was placed in lateral splints. After remaining there three weeks he was conveyed to Frederick City, where the splints were taken off the morning after his arrival. The surgeon in attendance attempted then to extend the leg by means of weights running over pulleys, but this arrangement caused so much pain and irritation that it was very soon abandoned. The anterior splint was then applied, to the great comfort of the patient, and the limb kept suspended some two months. No fragments of bone came away at any time, and recovery was unimpeded by the occurrence of any accident, save a small abscess in the popliteal space, which was punctured. Admitted Feb. 9, 1863. The patient stated that he was struck by two spent balls, by one upon the right arm, and by the other in the left hypochondrium from behind, and knocked down; while lying upon the ground his right thigh bone was fractured by a third. The last bullet was in his possession. Examination revealed the following facts. A minié bullet entered the posterior and inner surface of the right thigh, two inches below its junction with the buttock, passed forwards and upwards, fracturing the bone in its upper third, three inches below the great trochanter, and lodged anteriorly under the integuments nearly opposite the point of entrance. It was extracted the next day. There is much lateral angularity of the limb at the point of fracture, with shortening of two and three-quarter inches. The flexion and extension of the thigh are not much interfered with, but the limb does not rotate outwards beyond the median line. There is considerable stiffness of the knee-joint, unaccompanied by anchylosis, apparently attributable to contraction of the *ligamentum patellæ*. The patient walks without much difficulty, assisted only by a stick. He experiences no inconvenience whatever from standing or walking upon the injured limb, and suffers no pain either at the seat of the former fracture or elsewhere.

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The French Medical Association, in the matter of medical fees, does not consider that it can fix any scale of charges. "The fees of medical men," the report says, "must be regulated by conditions which vary considerably; they depend upon a kind of tacit agreement made between the doctor and his patient; and to attempt to fix the fee would be to interfere with the independence of both the parties. The Association, therefore, should abstain from any general discussion on the subject, as being injurious to professional dignity."—*Brit. Med. Jour.*

Reports of Hospitals.

NEW YORK HOSPITAL.

DISLOCATION OF LEG AND PATELLA.

(Reported by J. P. Kennedy, M.D., House-Surgeon.)

Hugo Tuno, æt. 21, German, ballet-dancer, admitted January 16th, 1863 (Dr. Peters). Patient can give a very imperfect account of himself, but states that just before admission he fell from the rigging of a ship. He does not know what distance he fell, or in what manner he struck. On examination he is found lying on his back, the right thigh being abducted, and the leg rotated inwards and adducted so that the heel rests on the middle of the calf of the left leg. The patella is also dislocated inwards, its posterior surface resting on the inner surface of the internal condyle of the os femoris. If a line following the spine of the tibia were prolonged upwards, it would strike the internal condyle. The tendon of the quadriceps extensor cruris is tense and firm, while those of the biceps, semi-membranosus, and semi-tendinosus, are lax. The external lateral ligaments are ruptured, and the whole articular surface of the external condyle can be felt just beneath the skin. In addition to the inward dislocation of the head of the tibia it is also displaced slightly backwards. The integument presents no marks of injury, and patient is not suffering much from shock.

Treatment.—Patient etherized, and dislocation reduced by extension, abduction, and rotation outwards, the patella being at the same time lifted over the internal condyle. Limb placed in a long fracture-box.

January 17th.—Fracture-box does not retain limb in good position. Straight apparatus for fracture of os femoris applied with slight extension. January 20th.—Position good, not much inflammation of knee-joint. Extension discontinued; continue straight splints. February 4th.—Splints discontinued. Position good. February 12th.—Plaster-of-Paris posterior splint applied, and patient allowed to sit up. February 19th.—Patient walks about with crutches. Was discharged cured on the 24th.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, Nov. 26, 1862.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

SPECIMENS OF KNEE-JOINT REMOVED BY EXSECTION AND BY AMPUTATION.

(*Continued from page* 139.)

CARIES OF THE TARSUS.

Dr. Bauer.—The fourth specimen was also one for which amputation had to be performed. It was the ankle-joint of a patient who had suffered a long time from caries, evidently originating between the os calcis and astragalus, thence extending to involve the tibio-tarsal articulation and the surrounding parts. The soft parts being so extensively involved, Syme's operation could not be resorted to and amputation of the leg was the only alternative.

INJURY OF THE SKULL.

The calvarium of a middle-aged man was next shown. The deceased had been found in the water with a large wound on the right side of his head. It was at first supposed that the blow had first been inflicted, and that the body had been thrown into the water. This, however, was proved not to have been the case by the absence of extravasation on the surface of the brain, and besides, the condition of the heart and lungs was that ordinarily observed in persons who have met death by drowning. There was one fissure through the external table near the parietal bos, and two other fissures on the internal table not corresponding. Inasmuch as fragments of soft wood were found in the external fissure the conclusion was arrived at that the man had struck his head against a beam in his descent into the water.

The sixth specimen was merely a distended gall-bladder the opening from which had been closed by an impacted calculus. No history of the case could be obtained. The contents of the sac consisted of a thickened and changed mucous secretion evidently the secretion of the lining membrane.

CYSTIC KIDNEY.

A pair of cystic kidneys were next exhibited, which had been removed from an English woman twenty-nine years of age, who died in an attack of convulsions. Previous to this day of her death she had always enjoyed fair health, At nine in the morning she was attacked with a convulsion, lasting fifteen minutes, and in a second attack which occurred that afternoon she expired. The autopsy was made at the request of the coroner. The heart was found slightly fatty, but otherwise healthy. The kidneys were very much enlarged and the seat of cystic degeneration; the right organ weighed twenty-eight and a half ounces, and was eight inches in length and five inches wide, while the left was thirty-two and a half ounces in weight, nine inches long, and five inches wide.

Dr. Bauer also exhibited a hip-joint removed from the body of a soldier who died at Fortress Monroe. A ball had entered the hip-joint, struck on the anterior circumference of the head of the femur, then passed around and was found lodging in the acetabulum, the ligamentum teres being entirely destroyed. Necrosis of the wounded tissue of the caput femoris had commenced to show itself. Death was occasioned by the profuse and protracted discharge from the wound.

SPECIMENS OF CANCEROUS DISEASE.

Next followed a series of specimens removed from a woman thirty-six or thirty-eight years of age, the victim of diffused cancerous disease. The patient had been well up to her thirty-fifth year, two years before her death. A swelling of the right side of her face then made its appearance, evidently originating in the antrum maxillare, and rapidly grew in size, pointing upwards and outwards. Extending downwards and inwards, it soon encroached upon the pharynx, so that in time deglutition, from first becoming very difficult, became towards the last almost impossible. After death, in addition to the disease of the antrum, there were found two large melanotic tumors connected with the omentum, and also cancerous infiltration of the pancreas. The stomach, from want of food to digest, had shrunken to the size of the larger intestine. There was also a cancerous tumor of the mammary gland. Besides this there were numerous melanotic nodules scattered over the surface of the body.

The tenth and eleventh specimens consisted of two stomachs, the seat of cancerous disease. One was removed from a woman fifty years of age, who had suffered from the disease for three years. A great destruction of the tissue of the stomach had taken place, and save for the deposit of new material, a large opening would have existed through the walls of the organ. The other stomach was taken from the body of a man sixty-four years of age, and in addition to the disease found in that organ there was also epithelial cancer of the œsophagus accounting for the troublesome symptom of difficult deglutition with which the patient was afflicted during the latter part of his life.

ŒDEMA GLOTTITIS.

The twelfth and last specimen was a larynx and trachea exhibiting the results of œdema glottitis together with diphtheritic inflammation. Dr. Bauer was called to the child when it was suffering from symptoms of simple catarrh, and in the course of the next twelve hours a deposit of diphtheritic membrane had taken place in the larynx, followed rapidly by œdema glottidis and death. The case would have been a very favorable one for tracheotomy had the consent of the parents been obtained.

CYLINDRICAL SEQUESTRUM.

Dr. Merritt presented an irregular cylindrical sequestrum, about five inches in length, which he had removed from the thigh stump of a lad seventeen years of age. The end of the sequestrum was found protruding from the extremity of the stump, and was without difficulty withdrawn with a forceps. The wound was then closed, and the patient made a good recovery. The following history of the previous condition of the patient was next read.

Henry de Wolf, 7th Michigan regiment, cot A, ward B, U. S. Hospital ship Euterpe, seventeen years of age, was shot through the left knee by a minié ball at the battle of Fair Oaks, May 31st. Amputation of the thigh was performed on the following day by Dr. Shadwick, surgeon of his regiment. He was placed on board the "Daniel Webster," at White House, and reached the Portsmouth hospital on Friday, 6th June. Here it was found necessary to cut the sutures in order to remove maggots. The wound continued to heal for about six weeks, and was nearly closed when evidences of dead bone began to present themselves. A cloaca formed on the inner aspect of the thigh, and discharged pus; in a few days the end of the femur could be seen projecting from the granulations, and a small longitudinal section of the bone came away. An abscess also formed on the outer aspect of the limb at its upper portion, and was opened. The incision healed up, and the stump continued in the same condition until his removal to the Euterpe, August 27th.

NEW YORK COUNTY MEDICAL SOCIETY.

ALFRED UNDERHILL, M.D., PRESIDENT, IN THE CHAIR.

Stated Meeting, March 2, 1863.

(*Concluded from page* 175.)

DISCUSSION ON TYPHUS AND TYPHOID FEVERS.

Dr. Bulkley considered typhus and typhoid fevers as varieties of the same disease, and remarked that some thirteen or fourteen years ago the wards of the medical department of the New York hospital were crowded with cases of both forms of the disease, and that it was often found difficult to distinguish between them.

Dr. B. remarked that Dr. Henry Kennedy, in a paper recently published in the Dublin Quarterly Journal, says, the types of fever recently prevailing in Dublin have been of a kind which could not with certainty be referred to either one or the other form of fever, but rather presented the marked characteristics of both. A large number of the cases during the first half of 1862 showed all the characteristics of typhus, including a dense crop of petechiæ, and to these was added diarrhœa in nearly every instance. In the only case examined after death, Dr. Kennedy found ulceration of the cœcum and first part of the colon, but instances occurred to Dr. Gorden, a physician attached to a large fever hospital, in which ulceration of Peyer's glands had taken place in connexion with well marked symptoms of typhus, including the petechial eruption. The conclusion of Dr. Kennedy was that typhus and typhoid fevers are the result of a single poison, and that no other hypothesis will explain all the difficulties which his own observations and those of others have raised.

With regard to the prognostic value of intestinal hæmorrhages in typhoid fever, Dr. Bulkley remarked that Bretonneau, Chomel, Louis, and others, considered this a dangerous symptom, but that Dr. Graves thought it rather favorable than otherwise, provided the loss of blood was not extreme. Mons. Trousseau was at first surprised at this opinion of Dr. Graves, but finds, on looking over his cases, that in seven years he has known but two deaths from such hæmorrhage. Others attacked with it not only recovered, but were better afterwards. Dr. Ragaine, in a memoir on this subject sent to the French Academy, relates one hundred and fifteen cases of typhoid fever, of which eleven suffered from hæmorrhage, and they all recovered.

Dr. Finnell alluded to the occurrence of typhus fever at No. 13 Mulberry street, where, out of a family of six persons, five adults contracted this disease, and three of them died, respectively on the 11th, 12th, and 15th days. The family occupied a single room, which was badly ventilated. During the year one death occurred in every building on the block. Allusion was next made to the well known pathological lesions (described so ably by Rokitansky), known as the typhus ulcer, consisting in ulceration of the solitary and agminate glands of the intestines, the ulcer being sound in the solitary glands, while in the patches of Peyer it assumed an irregular appearance. The first steps in the process being a deposit of material in the substance of these parts, which soon takes on ulceration, destroying the mucous membrane at several points; very little inflammatory action is observed in the immediate vicinity of the ulcer, the part appearing as if lacerated. The changes produced by dysentery are entirely of a different character; here we have no deposit of new material, but simply an ulceration of the mucous crypts and follicles, found so abundantly throughout the intestinal canal. Dr. F. maintained his belief in the identity of typhoid and typhus fevers.

Dr. S. Hanbury Smith remarked that he had been pleased to hear the opinion of Huss quoted and sustained by Dr. Henschel, and had taken the trouble to condense the voluminous history of one epidemic of fever, reported by the distinguished Professor of Stockholm, into the fewest words by which it could be described. The opinion of Huss had been previously pretty well made up on the subject from his very extensive observations both in Paris and as chief physician to the Seraphim Hospital, but the occurrence of the epidemic he was about to describe, seemed to afford irrefragable proof of their correctness.

The night patrol of Stockholm consists of 250 men, between the ages of nineteen and forty-three, lodging in barracks, forty-six in a room, and two in a bed. The rooms are large, nearly fourteen feet high, but with the whole building damp, and almost wholly without ventilation. The food and clothing of the men were good and abundant, and their health commonly excellent. They were on duty every other night. From the latter part of October 1841 to the end of the year, scarcely a night or day passed without rain or snow; and when the men came home thoroughly soaked, and went to bed, their wet clothes were hung up to dry in the same unventilated room in which they slept; while to insure rapid drying an unusually high temperature was kept up.

Without other warning than the previous occurrence, at comparatively distant intervals, of three sporadic cases of mild fever with gastric disturbance, on the 17th of December five sickened with continued fever, and from that date to the 29th of January (six weeks), sixty-four cases were sent to the hospital. The epidemic reached its acme on the 24th of December, that is on the seventh day. In addition to the sixty-four serious cases there were a number of abortive ones, three of which were deemed sufficiently serious to be sent to the hospital, where they rapidly convalesced after the sixth day.

So soon as the hygienic conditions of the barracks were improved the epidemic ceased.

The patients were distributed in different wards of the hospital, but no case originated there to give rise to any suspicion of contagion.

Now, of the sixty-four cases, originating under exactly similar causative conditions, twenty-two exhibited the cerebral form identical with typhus mitior, twelve the abdominal, or so-called typhoid or enteric fever, and thirty the mixed, intermediate between, or compounded of both. As to the causes determining the form of fever, it appeared that in proportion as the temperament was sanguine, and the constitution robust and plethoric, that form was likely to be the cerebral; the more lymphatic and weak, slender, or debilitated the subject the greater the probability that it should be the abdominal. Probably in consequence of the previous good health of the men the cases exhibited a remarkable exception, from complications, pulmonary congestion being the only one. The sequelæ were deafness, atony of the digestive apparatus, paralysis of the urinary bladder, œdema, and aching and tenderness of the lower extremities, which all yielded easily to treatment, with the exemption of one of the last in which paralysis with anæsthesia proved obstinate, but finally yielded. The post-mortem examination of the only two fatal cases, which were of the cerebral form, revealed those phenomena which are perhaps the *most constant* of all observed, where none in the present state of our knowledge are absolutely constant, namely, dissolved blood, mushy spleen, and wilted heart; in less terse, expressive, and every day language, a blood whose few coagula were of the loosest consistence; a spleen offering but slight resistance to the finger, and easily reduced to a pulp; and a heart falling flat when laid on the table, with remarkable tenderness of its muscular substance. The intestinal glands, both solitary and agminate, were in a congested but not ulcerated condition.

In the history of this epidemic it appeared to Dr. S. that we have evidence, not on a gigantic scale it is true, but of a most convincing clearness, that the same cause or chain of causes, *although accompanied by a minimum of modifying influences*, suffices to produce two principal varieties of continued fever, mild typhus and typhoid, together with a mixed or intermediate form, leaving out of view what have been called the abortive forms. And is it possible to doubt that the action of intensifying circumstances might have converted some of such cases of the cerebral form—typhus mitior—into typhus gravior, the real old fashioned *typhus*, in any of the forms determined by such modifying circumstances, and known as ship, camp, jail, hospital fever, etc., etc.? Can we, in the face of such evidence and such considerations, admit of more than one genus, fever, though species, varieties and sub-varieties, may be most numerous? For his part, Dr. S. could not but think that it conduces to clear ideas and sound practice to view all idiopathic fever as one disease, the essential pathology of which is the reaction of the system against a blood poison (or virus) with efforts to eliminate it. Unless we adopt this view how shall we explain or understand the change of type which occurs in all fevers?

Dr. Smith added a number of illustrations, both of mutability of type in the same fever, and of the great influence of modifying circumstances in determining that type.

Dr. Joel Foster mentioned that very recently typhoid fever invaded a regiment of 800 soldiers, then in barracks near the village of Schoharie, N. Y., but of the whole number seventy were attacked. They all had the characteristic symptoms of typhoid fever, but of a mild form, the fatality confining itself to only three or four cases, although subjected to poor ventilation and bad regimen. Shortly after the regiment was ordered to the seat of war. During a temporary halt in the Park barracks of this city the fever showed itself once more. Fourteen privates contracted the same, and were sent to the New York Hospital for treatment. All were well marked cases; does not remember how many of them died, but thinks that only two cases proved fatal. The disease spread all around the surrounding county of Schoharie after the regiment had departed.

After reaching Washington city, the Lieutenant-Colonel of the regiment was sent home suffering from it. Nearly every one had diarrhœa, but only one in eight had petechiæ. Dr. Foster considers the two types as one and the same malady.

On motion, it was resolved that the identity and treatment of typhoid and typhus fever be continued at the next regular meeting of the Society.

American Medical Times.

SATURDAY, APRIL 18, 1863.

RESPONSIBILITY OF PHYSICIANS IN ADMINISTERING CHLOROFORM.

The question of the responsibilities of the physician in the administration of chloroform, or for alleged injuries resulting therefrom, has at length been decided in a Court of Law. The case was tried at Philadelphia before Judge Hare, and a jury, and among the witnesses we notice the names of Professors Gross and Goddard. The evidence in this case and the charge of the Judge have an important bearing upon practice.

The Plaintiff, Mr. Bogle, was a driver on the horse-cars, and was thrown from his car, striking his head against a tree-box. He was taken up insensible, but so far recovered as to resume his work on the following day. Some three months after the accident, Mr. B. called on Dr. Winslow, a dentist, to have several teeth extracted. Chloroform was administered, and it was found necessary to give it in large quantities, and for three-quarters of an hour, and in the intervals between the drawing of the different teeth, as signs of returning consciousness appeared. The operation completed, Mr. B. left in company with a lady friend, but he staggered like a drunken man, and was obliged to lean on his companion for assistance. He grew worse after that; his tongue thickened so that his articulation became indistinct, and finally, on the fourth day, he had paralysis of the left side. Dr. Winslow was called, and treated him for this sickness for four weeks, at the end of which time no perceptible relief having been afforded, another physician, Dr. Longshore, was employed, under whose treatment he remained until he was able partially to resume his employment. For the loss sustained by him by reason of his sickness and continued inability to attend to his duties the suit was instituted.

Dr. Longshore, the principal witness on the part of the prosecution, testified that, after hearing the testimony in the case, he inferred that the chloroform was the cause of the paralysis; never knew chloroform to be given without producing paralysis; that is its purpose; it is not permanent, however; there are cases reported in the books of paralysis of the tongue resulting from the use of chloroform; never heard of a case of paralysis of the side; chloroform might produce paralysis of the side by reason of its effect upon the brain; cerebral hæmorrhage produces paralysis; never heard of a case of cerebral hæmorrhage produced by chloroform; the kick of a horse will produce it; does not think it resulted from such a cause in this case; there is no standard for a dose of chloroform; the operator must be governed by the action of the patient; if the effect was not produced in three-quarters of an hour I would stop the use of the chloroform, as I would be afraid of the consequence; there might have been an injury to the brain, brought into action by the use of chloroform, but if it resulted from injuries received two months before, there would be complaints on the part of the patient. Dr. Harbeson testified that he knew of a case where paralysis was caused by the use of chloroform; a tumor had been removed from the left breast of a patient while under the influence of chloroform, and paralysis ensued; it was considered a dangerous agent, and was, for that reason, not used at the Pennsylvania Hospital; he had known of death resulting from its use.

The defence set up was, that Dr. Winslow was a graduate of twenty years' practice, eminently skilled in the use of chloroform, and that no matter how large the quantity used, or its length of application, no such effect as paralysis could result. Besides it was on evidence that in the preceding January the plaintiff had been kicked in the breast by one of his horses, hurled over the dasher into the street, and against the curb, his head violently striking a lamp-post, and it was contended that this was more likely to have been the cause of the paralysis.

The character of the evidence on the part of the defence may be gathered from the testimony of Prof. Gross. He testified that chloroform is regarded by the profession in general as a proper agent to relieve pain; it is one of the approved remedies of the profession; in the present case he considered the length of time resulted from the want of the proper number of assistants by Dr. Winslow; don't think there is any case on record, except two referred to by Dr. Longshore, that chloroform caused paralysis; these two are cases reported by Dr. Haphold, of South Carolina, and these cases are not authentic; he has given chloroform since 1842, and under almost all circumstances; to a child of six weeks of age, and to a person of seventy-five years of age; he had given it to all classes, and never witnessed any ill effects from it; he did not think that the paralysis in this case was the result of the chloroform; in his judgment it had nothing to do with it. Prof. Gross explained the effects of a concussion of the brain in producing paralysis; several months might elapse between the injury and the paralysis; he thought it not unlikely that the patient would complain of headache, etc.; though it did not follow that he would actually complain; if the man had not been kicked by a horse, he would not attribute the paralysis to chloroform from what he knew of its effects; he had given several ounces to patients; in Louisville he gave a man eight ounces, and kept him under its influence for three hours; chloroform, like many other agents which a physician is obliged to use, is dangerous; so is laudanum, etc.; if improperly used it would not produce paralysis; he would not consider it improper to continue the use of chloroform after a patient has resisted its influence three-quarters of an hour; he should continue for five hours, until he had accomplished his object; a patient who resists only proves that he has not taken enough.

The charge of Judge Hare is remarkable for its clear enunciation of the principles which should guide the jury in arriving at conclusions as to the existence of malpractice in this or any other case. He said:—

> "We know nothing of the effects of the agents of this description, except from experience, and the records of that experience are to be found in scientific works, and the evidence of men who have made the subject their study. The jury are, however, to decide in the last resort; but even if they doubt the safety of the agent employed, there is still a consideration of the highest reason which they ought not to disregard. All science is the result of a voyage of exploration, and the science of medicine can hardly be said to have yet reached the shore. Men must be guided, therefore, by what is probably true, and are not responsible for their ignorance of the absol [illegible] h which

is not known. If a medical practitioner resorts to the acknowledged proper sources of information, if he sits at the feet of masters of high reputation, and does as they have taught him, he has done his duty, and should not be answerable for the evils which may result from errors in the instruction which he has received. Medical opinion varies from time to time. What is taught at one period may be discovered to be erroneous at another; but he who acts according to the best known authority, is a skilful practitioner, although that authority should lead him, in some respects, wrong. He will then have done all that he can, all that is given to man to do, and may leave the result, without self-reproach, in the hands of a higher power. If, however, you should decide that chloroform was an improper agent, or that it was erroneously administered in this instance, you will then have to consider whether the paralysis was the result of its administration. * * * * If we were to traverse the whole circle of mankind, we might possibly find, even among healthy man, some one who could be paralysed by its influence, or if not, still among the numerous diseases with which man is afflicted, there may occur peculiar conditions of the system in which chloroform may tend to paralysis. This topic is not irrelevant, because the medical testimony here is, that the severe blow on the head received by the plaintiff might have produced a latent disease only requiring some exciting cause to rouse it to activity. If the plaintiff was, from previous circumstances, predisposed to paralysis, it might well happen that the extraction of his teeth without the chloroform, or the use of chloroform without the extraction, would bring on a paralytic attack.

"Even if this was the case, still it would not be just to make the defendant answerable for consequences which he could not foresee, which were not the ordinary or probable results of what he did. He was only bound to look to what was natural and probable, to what might reasonably be anticipated. There is nothing to show that he was made acquainted with the accident that had befallen the plaintiff, or had any reason to suppose that there was greater danger in his case than that of other men. Unless some such guard is thrown around the physician, his judgment may be clouded or his confidence shaken by the dread of responsibility at the critical moment, when it is all-important that he should retain the free and undisturbed enjoyment of his faculties, in order to use them for the benefit of the patient."

It is scarcely necessary to add that after such an able exposition of good law and rational medicine the jury gave a verdict in favor of the defendant.

THE WEEK.

We have received a printed reply to the Committee of the Sanitary Commission on "Relief of Sick and Wounded Soldiers," by Drs. Swinburne and Willard, of Albany; the Committee of the State Medical Society of New York. The arguments presented in favor of State action and independent efforts are well known to the readers of the Medical Times, and need not be again stated. The insinuations against some of the agents of the Commission for not doing their duty is not a just reflection upon the Commission. The character of the Commission, the value of its great work, and the energy with which it accomplishes its beneficent purposes, are subjects upon which there is but one opinion. If it is desirable for the State to manifest its interest in its soldiers let it appropriate a liberal sum to be expended at the discretion of the Governor.

We regret to notice an effort on the part of Prof. Brainard, of the Chicago *Medical Journal*, to discourage the approaching meeting of the American Medical Association. He alleges that the Committee had no authority to adjourn the meeting of 1861–62, and that the present appointment for a meeting did not emanate from the whole committee; the inference being that "some of them" have assumed improper authority. It is true that the committee assumed power to adjourn the meeting of 1861–62, but they acted under extraordinary circumstances, and in compliance with what they deemed the wish of the profession. They have called the next meeting in accordance with the same authority, and they will be sustained. It is painful to read in an influential *Medical Journal*, that the meeting in June "can have no claim to be considered national, and must, if convened, but favor the effect of for ever perpetuating its sectional character." Such opinions are current in certain sections of the South; but they should find no sympathy or expression in the medical profession of the loyal States. It is suggested by Prof. B. that the meeting be held on the second Tuesday of June, instead of the first, to avoid the "Canal Convention;" but no action has been taken by the committee.

Reviews.

PAMPHLETS.

The *Annual Report of the Surgeon-General of the State of New York* contains a record of the operations of that department, during the year 1862. The effective force of troops from this State was doubled, and the medical staff nearly trebled, numbering 584. Surgeon-General Vanderpoel reviews the efforts made by the State authorities to afford aid to the troops from New York during the Peninsular Campaign, and says, "its practical operation would have been all but impossible." He pays a glowing tribute to the self-sacrificing labors of the Volunteer Surgeons who visited the Peninsula, and rendered their assistance after the sanguinary battles. The examination of recruits was much more thorough than during the previous year, and the surgeons selected were better qualified. The Surgeon-General adopted the plan of promotion by corps, and date of rank and merit were the standards. This system has operated so well that he commends it to his successor. After the offer of a State bounty to recruits, the Surgeon-General appointed three medical examiners, viz. Dr. Cogswell, of Albany, Dr. Wry, of Elmira, and Dr. Thomson of New York, to reinspect those recruits to whom bounties were to be paid. The wisdom of this course is seen in the number of persons rejected, who had already passed the regular examination. The report contains tabular lists of all the volunteer surgeons, surgeons and assist.-surgeons of regiments passed during the year 1862, and examining surgeons under the draft. In the Appendix, also, are reports of the examining surgeons for recruits claiming the State bounty. Dr. Cogswell examined 5908 and rejected 458; Dr. Wry examined 2372 and rejected 305; Dr. Thomson examined 8700 and rejected 287. The report of Dr. Thomson is published in full, and contains many interesting observations relating to the disabilities of recruits.

The Report of the Surgeon-General of Pennsylvania, for 1862, gives an interesting summary of the operations of that department. Pennsylvania has been very active in supplying volunteer aid after seven battles. She sent her Surgeon-General with a corps of surgeons and nurses to Ball's Bluff, Winchester, the Peninsula, Hagerstown, and Boonsboro. These expeditions did good service. The total number of appointments during the year was, surgeons 96, assist.-surgeons 283. There resigned 28 surgeons, and 36 assist.-surgeons. The deaths were, surgeons 1, assistant-surgeons 4.

Correspondence.

HOSPITALS FOR OPERATIONS.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—Operating hospitals are needed to complete our system. Three would probably be sufficient—one in Philadelphia for the army east of the Alleghanies; one in Cincinnati for the Department of the Cumberland; and one at St. Louis for the forces under Major-Generals Grant and Curtis. In our General Hospitals, as at present arranged, the Medical Staff is too small to be in condition, as to time (to say nothing of skill, etc.), to perform all the operations that should be performed. Many soldiers have been discharged on account of curable surgical lesions, merely for want of such hospitals. They could be conducted without greatly increased expense, and could have a staff of experienced civil surgeons—for the affections brought before them would have nothing peculiar to military surgery about them. Suppose Gross at the head of one in Philadelphia, Blackman in Cincinnati, and Pope in St. Louis, the soldier's chances would be much improved. Cases would be sent to these hospitals from the field, and operated on or discharged as might seem best.

The warm weather is again setting in: we are going still further south—Cannot some means of reducing the amount eaten by the soldier be devised? Unrestrained, he eats himself sick. Commissaries will not commute the rations not needed, and *he eats to* SAVE *them!* The sick-list and the grave-yard tell the result. P....

ST. LOUIS, MO.

ALUMNI ASSOCIATION, C. P. S.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—The fifth annual meeting of the alumni of the College of Physicians and Surgeons was held on the evening of the 13th inst., at the house of the Vice-President, Abram Du Bois, M.D., Dr. Gordon Buck, President, in the chair. Among the alumni (of whom more than 70 were present) we noticed the venerable heads of Drs. Edward Delafield, Isaac Wood, and Jos. M. Smith, of this city, and Thomas W. Blatchford of Troy, N. Y., the Nestors of our profession. In the absence of the Secretary, Dr. J. R. Vedder, from ill health, the annual report was read by Dr. J. H. Hilton. Six alumni are reported to have died during the past year:—Dr. W. H. Milnor, Jacob Harsen, John Miller, Geo. H. Tucker, of New York, and Drs. Lyman and Denison of the U. S. Volunteers. The Treasurer, Dr. H. B. Sands, reported that a balance of $60 was due for the expense of printing the annual address.

On motion of Dr. E. L. Beadle, an assessment of two dollars was laid upon all alumni of over two years. The Chair appointed Drs. B Ogden, Beadle, and Adams, a committee to nominate officers for the ensuing year. They reported the names of Abram Du Bois, for President, David Linsly, for Vice-President, J. H. Hilton, for Secretary, and H. B. Sands, Treasurer. For *Orator*, Dr. Joseph Mauran, of Providence, R. I.; *alternate*, Dr. H. A. Du Bois, of New Haven, Conn. Twenty-one councillors were also nominated, from different States of the Union. On motion, the report of the committee was unanimously adopted, and these officers were declared to be duly elected. A vote of thanks to Dr. Roberts for his very able discourse was then tendered, and a copy requested for publication. On motion, the thanks of the association were voted to Dr. Du Bois for his hospitable entertainment.

We beg leave to propose to the association a change of programme in its next anniversary. Let the association meet at some convenient place, transact its ordinary business, and spent the remainder of the evening at the festive board. In this way, a much larger attendance would probably be secured. The entertainment, being social, would make us better acquainted with each other, and the formal business-like character of the previous meetings be changed for the better. We hope that the experiment may be made, at least for the next anniversary.

ALUMNUS.

REMEDIES FOR CAMP DIARRHŒA.

[To the Editor of the AMERICAN MEDICAL TIMES.]

HEADQUARTERS, MEDICAL DEPARTMENT.
DISTRICT ST. LOUIS, March 14, 1863.

SIR:—I am induced to sent you the following formula in cases of camp diarrhœa. It was introduced by my friend, Surgeon Ford, 8th Ind. Inf. Vol.:

℞. Strychnos, gr. j.
Sulph. morph., gr. ij.
Ft. Pil. No. xij. One pill three or four times a day.

Or this:

℞. Strychnos, gr. j.
Citratis ferri, ℈j.
Gum. opii, gr. xij.
Ft. Pil. No. xij. One, three or four times a day.

These general formulas may be varied to meet the particular exigencies—the anodyne may be omitted in some cases, in others the iron—the tonic powers of the strychnia being the important constituent.

I have the honor to be
Your obedient servant,
WM. C. OTTERSON,
Surg. U.S.V., Med. Director, Dist. St. Louis.

Army Medical Intelligence.

SPECIAL ORDERS, No. 143.

WAR DEPARTMENT, ADJ. GEN'L'S OFFICE.
WASHINGTON, March 28, 1863.

By direction of the President Surgeon Wm. A. Gordon, 30th Illinois Vols., who was mustered out of service, by order of the Commanding General Western Department, is hereby restored to his command, and Surgeon D. N. Moore, same regiment, is mustered out of the service, as of this date.

By direction of the President the following Officers are hereby dismissed the service of the United States:

Surgeon J. G. Buchanan, 32d Ohio Vols., for using insubordinate language, with loss of all pay and allowances, now due or that may become due him.

Assistant Surgeon Silas E. Sheldon, 32d Ohio Vols., for using insubordinate language and breach of arrest, with loss of all pay and allowances, now due or that may become due him.

Assistant Surgeon D. H. Prunk, 20th Indiana Vols., to date November 16, 1862, for receiving money from enlisted men for making out their certificates of disability for discharge from service, and for conduct unbecoming an Officer in blindfolding said enlisted men whilst examining them.

Assistant Surgeon Albert W. Kraft, 1st Virginia Vols., having been reported by his Commanding Officer, for utter ignorance of the duties of a Medical Officer, and having declined an examination by a competent Medical Board, has been mustered out of service, from November 18, 1862, the date of muster in.

By direction of the President, Surgeon W. D. Stewart, U.S.V., has been dismissed the service of the United States, with loss of all pay and allowances, now due or that may become due him, for absence without leave and neglect of duty.

Medical Inspector Joseph K. Barnes, U.S.A., as Medical Inspector of the Department under Major-General Dix, and also of the Middle Department, station, when not on inspecting duty, Washington, D. C., to date from March 1st, 1863.

Surgeon W. S. Forbes, U.S.V., now on duty in charge of the Episcopal Hospital at Philadelphia, Pa., to report in person to the General commanding the Department of the Tennessee, and by letter to Assistant Surgeon General Wood, at St. Louis, Mo.

Assistant Surgeon L. D. Harlow, U.S.A., now on duty in Philadelphia, to report in person to the General commanding the Department of the Cumberland, and by letter to Assistant Surgeon-General Wood, at St. Louis, Mo.:

Assistant Surgeon J. A. Morton, 24th Maine Vols., now on detached service at East New York, to join his regiment without delay.

Surgeon J. S. Bobbs, U.S.V., now on duty at Memphis, Tenn., to repair to Indianapolis, Ind., and assume charge of the General Hospital at that place, when, in the opinion of the Assistant Surgeon-General, his services are supernumerary with the Army of the Tennessee.

Assistant Surgeons Rufus Sargent and Charles H. Dana, both of the 52d Pennsylvania Vols., and on detached service, the former at Yorktown, Va., and the latter at Newbern, N. C., to join their regiments without delay.

8. The following officers are hereby discharged the service of the United States on account of incompetency:

Surgeon F. T. Hurxthal, 19th Ohio Vols.
" J. B. Armstrong, 31st Indiana Vols.

Original Lectures.

REMARKS ON THE MUMMIED HEADS

TAKEN FROM THE JIVARO INDIANS OF ECUADOR,

VITH AN ACCOUNT OF THE VARIOUS MODES OF EMBALMMENT,

EING AN ABSTRACT OF A PAPER READ BEFORE THE AMERICAN ETHNOLO- OAL SOCIETY.

By J. KING MERRITT, A.M., MD.,

OF NEW YORK.

PART I.

DESIRE to call attention to two mummied heads of iminutive size, which, with a number of others, were recently obtained from the Indians who inhabit the inacces- ble and mountainous region around the base of the vol- ıno of Sangay, in the province of Chimborazo, where ıe old Spanish town of Macas is situated.

There were ten of these specimens taken from the In- ians, so far as I am informed by Mrs. Hassaurek, the ife of the American Minister at Ecuador, through whose indness I am allowed the privilege of presenting these ırious objects, with the accompanying history and descrip- on of them.

Mrs. Hassaurek states that these ten mummifications e in the possession of the following parties; viz. four ere bought by Mr. Hassaurek; three by the Spanish Iinister, who sent them to Madrid; two by the French hargé d'Affaires; and one by the English Consul. f the four obtained by Mr. Hassaurek, one is retained y himself, and one he presented to a Dr. Mackay, ho is in Washington at present, and has been exhibiting is specimen to the savans of the Smithsonian recently. he remaining two are those under our consideration. I n told by Mrs. Hassaurek that there is a tradition among ıe Indians, that these heads were originally taken from Huacas"* belonging to their ancestors, many genera- ons ago, and that since they have been kept in their huts, reserved with great veneration, and jealously guarded as ousehold divinities. An additional statement is given ncerning the history of these interesting and mysterious eads, in a communication from Mr. Hassaurek himself, ho sent them from Quito to this country last summer. le writes as follows:—"These heads were formerly in ıe possession of the Indians who live in the town of lacas, which was anciently of great importance, but has nce decayed, owing partly to the general decline of panish America, partly to the ruinous policy of the Span- h Governmant, and partly to the unmanageable character f the Indians. It has always been observed that the In- iaus of Macas treated the heads with a veneration verging n idolatry. I was told by a former Governor of Chim- orazo, to which province the town of Macas belongs, that ıe oldest Indians in the country did not recollect the me when these heads were *not* in the possession of their ibe. They said that a great feast was given every year ı their honor, when the old men approached them with reat submission, having their lances pointed downwards, hile the young men remained within a respectful dis- ınce. Concerning the threads which are attached to the ps, I have heard various and contradictory accounts. ome say they indicate the number of enemies slain in attle by the warriors to whom these heads were attach- l. Another account is given by Dr. Andrade, the Curate f the village of Machuchi, who says that these heads were eated as idols by the families which possessed them, and ıey attributed to them many supernatural qualities. They pecially implored them to keep their family secrets, and r every secret intrusted to the idol a string was drawn ırough the lips. Others say that the strings are only ornaments, because the Indians on solemn occasions wear these heads suspended around their necks, and consequently the pendent strings were intended to improve the appearance of them. The art to contract the heads to such a wonderful miniature size seems to have been lost, like so many other arts known to the ancient Peruvians; as, for example, the cement mixture which they used for building purposes instead of lime mortar, that gave to the different stones of which the walls were composed the appearance of one solid block. How these heads in question were contracted to such a diminutive size, I can only repeat rumors; one is, that they were contracted by hot stones or pebbles, which were put into the cavity of the head after the bones were removed; another is, that they were contracted by a process which occupied a year. The aforesaid Dr. Andrade says, "that if one should be the head of an enemy slain in battle the victor will do penance for the time necessary in the preparation of the head, that he fasts and prays to atone for the deed, but when the head is mummified he then adopts it as an idol. There is not, however, any account of such heads being prepared in these times, but they are considered relics of past ages, which have been handed down from generation to generation. All these statements and traditions may be considered as imperfect, or suppositions of the present day. But, nevertheless, this is certain, *that these heads were in the possession of the Indians at Macas, by whom they were treated with great veneration.* I bought them of the present Governor of Chimborazo, *who undoubtedly had forcibly taken them away from their owners.*" Mr Farrand, who has been a number of years in Ecuador and Peru, and has travelled much, informs me "that the Indians at Macas and the vicinity do not have at the present time any intercourse with the Spanish population, but carry on a traffic with an intermediate friendly tribe, called the Napos, who maintain a trading intercourse with them." He also states that he has heard there is not a white person now in the town of Macas."

The Indians of this section speak their native original language, and practise their ancient manners and customs. They belong to that fierce, warlike, and proud Jivaro family of Indian tribes, which were never conquered by the Incas. At the time of the Spanish conquest, however, most of the tribes of this intractable family were partially subjugated. The tribe which inhabited the region around the base of the volcano of Sangay, and on the banks of the river Morona, were so unfortunate as to have in their country abundant deposits of gold, and consequently the attention of the "Conquistadores" was attracted to these. Soon their country was overrun, and the town of Macas built, which is situated on the river Morona, one of the branches of the sources of the Amazon, and is 130 miles southeast of Quito. Macas is also but a short distance from the volcano of Sangay, which is one of the most active volcanoes on the globe at the present time. The Spaniards never attained complete control over the Jivaro Indians, nor to any extent civilized them. They remained sullen and uncompromising, and when, on the decline of the Spanish dominion in Peru, the opportunity offered, they drove from their country the remnant of the intruders, and relapsed into their original independent and isolated state. They are described as being quite small, but very active and muscular, with black and very animated eyes, and with bent noses and thin lips. They use the lance with remarkable dexterity, and the shield exceedingly well.

Wm. Bollaert, F.R.G.S., in a brief paper on the idol heads of the Jivaros recently published in the *London Intellectual Observer*, thus speaks of this people and these deified heads:—"They are an ancient and warlike people, and their history is given by Velasco, the historian of Quito, together with an account of their conspiracy against the Spaniards in 1599, an outbreak which procured for them the title of 'Araucanos' of the North. At that period they made the Governor of Macas prisoner, and killed him by pouring molten gold down his throat; afterwards they destroyed the Spanish settlements in their part of th country *in one day*, killing the men, but taking the women into captivity. In modern times many expeditions have been organized to punish them, but all have failed. The Jivaros are a warlike, brave, and astute people; they love liberty, and can tolerate no yoke. Many have beards and fair complexions, most probably arising from the numbers of Spanish women they captured in the insurrection of 1599. They have fixed homes, cultivate ' yucas,' maize, beans, and plantains, and their women wear cotton cloth. They live in well built huts made of wood, and sleep in fixed bedplaces instead of hammocks. Their lances are made of the Chonta palm, the head being triangular, thirty to fifty inches long, and ten to fifteen inches broad. They are accustomed to take a strong emetic every morning, consisting of an infusion of the "guayusa," or tea plant, for the purpose of getting rid of all undigested food, and being ready for the chase with an empty stomach. Their hair hangs over their shoulders, and they wear a helmet of bright feathers. Their branch tribes are constantly at war with each other; all the tribes speak the same language, which is sonorous, clear, and harmonious, easy to learn, and energetic. At each village they have a drum called 'Tunduli,' to call the warriors to arms, and the signal is repeated from village to village. When engaged in war their faces and bodies are painted, but during peace they wear breeches down to their knees, and a shirt without sleeves. One of their prominent customs is to deify the heads of their prisoners. This fact has been known for some time, but only lately have any specimens been obtained. The first was brought to Europe by Professor Cassola in June, 1861, and was exhibited to a few persons in London. This had been stolen from a temple on the river Pastasa. At the latter end of the same year another specimen fell into the hands of Don R. de Silva Ferro, Chilian Consul in London, with an explanatory document, which has been translated by Mr. Bollaert, and communicated to the Ethnological Society, together with some account of the Jivaros themselves. An idol head was obtained through a baptized Indian, who persuaded a Jivaro notorious for ill luck that this was occasioned by the imprisonment of the idol, who was desirous to travel. The Jivaro handed it over for this object, when it was taken to the Governor of Chimborazo, who sent suitable presents to the Indian in return for his interesting gift. These curious trophies are thus prepared, *according to tradition*:—After a war the heads of the victims are cut off, the skull and its contents removed, and a heated stone (*it is said*) is introduced into the hollow of the skin; desiccation goes on, and it is reduced to one-quarter its original size, retaining some appearance of the features. A feast ensues, when the victor abuses the head roundly, to which the head is made to reply in similar terms—the Indian priest being the spokesman for the head, or 'chancha' (an Indian name for a sow), and he concludes his part thus:—'Coward, when I was in life, thou did'st tremble at the sound of my name. Coward! some brother of mine will revenge me.' The victor at this raises his lance, strikes and wounds the face of his enemy, after which he sews the mouth up, dooming the idol to perpetual silence, excepting as an oracle; questions being put to it when the inquirer is under the spell of a narcotic. When the Jivaro is pressed by the enemy, and has not time to cut off the head of an enemy, the ceremony is performed on the head of a sow, which is adored as a real idol head. Should the fruits of the earth not be in abundance, the women hold a feast of supplication to the head, and if their request is not granted, the hair is shaved off and it is thrown into the woods."

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* "Huacas" are the cemeteries and holy places of the aboriginal races of eru.

This is all the history concerning these heads which I am able to give with the brief accounts of this people, and of the locality whence they came. I will now proceed to describe succinctly the heads which are in my possession. But first, I may be allowed to indulge in a portraiture of the general appearances of these specimens of mummification. We see a head and face scarcely the size of a half-grown howling monkey, with a great profusion of long, lank, black hair; also, we see a fierce and sooty pigmy face, decorated with a dingy tassel of cotton cords pendent from its compressed and protruding lips, and wearing the scowling expression of a Comanche warrior. If one can realize such an object, he will entertain an idea of the first impression received by a casual observer. Though these nondescripts are novel and startling to ordinary observation, still more do they become mysterious and wonderful as one examines and studies them. I will here mention some of the peculiarities pertaining to them. 1st. The size of the entire head and face is about equal to the medium fist of a man. 2d. The osseous structure, the brain, the eyes, the tongue, and all the inner soft parts, except the muscular tissues in close connexion with the integuments, have been removed. 3d. The external surface of the integument is jet black, and of polished smoothness, without the least appearance of shrivelling, and retaining in a marked degree the characteristics of human skin. 4th. The tissues of both head and face are hard and unyielding as ebony, and emit a sharp and almost metallic sound when percussed. 5th. The inner surface of the cranial wall is knobby, spongy, and mouldy, with the pale color of undressed leather, as seen through the large opening at the base of the head, at which point it was severed from the body. 6th. The decapitation was rudely performed with a dull instrument (judging from the jagged edge of the incision), at a point of the neck anteriorly corresponding to the top of the thyroid body, and posteriorly at somewhat a lower level, so as to include with the head that portion of the nucha which is ordinarily covered with hair in man. 7th. The general configuration of the specimen is as follows:—the head and face are exceedingly narrow, but quite long in their antero-posterior axis; the forehead is rapidly retreating; the sinciput is contracted, low, and straight, and the occiput is very prominent and projecting backwards.

It is evident that through the foramen magnum, or aperture at the base of the head resulting from the decapitation the brain, the tongue, and most of the bones of the cranium and face were removed, from the fact that this opening has been enlarged by vertical incisions, which have been closed by sutures of cotton thread. The scalp is clothed with a profusion of straight, stiff, and rufous black hair, which falls in tresses the length of nearly two feet from the vertex posteriorly, while anteriorly the locks are cropped after the usual Indian custom. The hair is firmly attached to the scalp, and is not at all friable. Examination under the microscope by Dr. Shrady, showed that the individual hairs differed in no important respect from those of the Anglo-Saxon race some were oval in shape, others cylindrical, and a few inclined to be triangular. The rufous hue is probably owing to the exposure to the sunlight and the weather, fo this is more decided on the vertex and among the oute tresses than observed among the inner locks when brough to view. On the right temple, about three-quarters of an inch above the top of the ear, and just within the limits o the hair, exists an irregular opening through the scalp, the edges of which are especially ragged, spongy, and friable This is the fact in regard to both specimens, the only difference being in their locality, as one is just anterior to the margin of the hair in the right temple. I am disposed to think that these were produced at the time of death, and are the results of a wound inflicted by a blunt instrument as the conditions of the tissues in their vicinity are indicative of the infiltration and softening of the parts, which rendered them less able to resist the tendency to decomposition. At the vertex of the scalp are two small perforations, through which pass a loop, and this is undoubtedly intended to suspend the head about the neck of a person, as the hair around these perforations is worn away apparently by friction. The several parts of the externa

ır present their natural configurations and relations so
rfectly, that it is difficult to imagine any contraction
ıving occurred at all; they do not exhibit any of the
ırivelled or pinched appearance always seen in desiccated
oro-cartilage. On close examination can be seen the hole
rough the lobe for the ear-ring, and in the case of one
ere is a broken fringed loop still attached, and passing
rough the perforation of the lobe. In the delineation of
e facial features I think no one will deny that there is
tle to be found which would attract the limner in search
r the lines of beauty, yet do we see the outlines and
pression of the human face remarkably well preserved.
the right side of the forehead, near the irregular open-
g in the right temple already described, there is in one
ecimen a depression with an incision closed by sutures;
imilar incision and depression occur in the other speci-
en, but through the left temple, and closed by sutures.
ıese seem to have been made for the purpose of removing
e inner parts implicated in the neighboring battle-wounds,
as not to disturb them, that they should remain in the
me condition as they had occurred. There are likewise
isions closed by sutures existing at the base of the
se between the orbits—in one case extending from one
bit to the other. These were also made, evidently, to
move the bone, and inner parts in these vicinities. The
ebrows are distinct, and especially abundant at the nasal
tremities; the ciliæ are firmly attached, and of a brown
ıe. The eyelids are preserved, but closed and inverted;
e ciliary borders are fringed with eyelashes. The nose
prominent, expanded, and unshrivelled; in both nostrils
abundant ciliæ, which are firmly attached and very
ff. The cheeks are unwrinkled, and present the natural
tlines at the malar and zygomatic regions, thus giving a
aracteristic Indian expression to the face. The lips are
mewhat imperfect in both specimens, only slightly so in
e, however, and have been repaired by a resinous sub-
ınce. They present a compressed, puckered, and pout-
appearance, as if drawn together by interrupted sutures;
re are three perforations through both lips, which con-
n loops, and to these are suspended a short horizontal
aid, which is composed of nooses in regular order, made
attaching the long pendent cords at their middle—so
ıt there is a horizontal base-cord suspended by the loops
ough the lips, and this base-cord supports a long pen-
nt tassel of cotton cords, about twenty inches in length.
ıave been thus explicit in the description of this tassel
ndent from the lips, because in some respects it resem-
s the Peruvian "Quippu," which was the chronicler of
ents during the Inca sovereignty. At the lower portions
the cheeks and beneath the chins of both specimens, the
egument presents a faint reddish tint, which seems to be
oduced by a pigment of an earthy character, like that
d by the South American Indians to paint their faces
time of war, and to decorate their pottery. An acci-
ntal fracture which has occurred recently in the case of
e of these specimens, and which embraces quite two-
ırds of the vertical circumference of the head, gives the
portunity to examine the tissues of the integuments
changed by long exposure. The exhalant and absorbent
ssels extending from the epidermis to the cutis vera,
follicles and hair processes, which also pass through
the skin, all are distinctly seen not infiltrated with any
eign substance, but in a normal and simply desiccated
te. The inner surface of the vertical region of the scalp
one specimen presents a black and glistening aspect, as
resulting from the application of a degree of heat suffi-
nt to roast the parts, *which has evidently occurred at a
nparatively recent date, and is not at all apparent in the
er specimen.* The diameters and circumferences of these
ads, when compared with those made by Dr. Morton of
smallest cranium of an ancient Peruvian, as published
his Crania Americana, are about one-third as great.
us we see in the delineation of these two specimens of
ımmification that their conditions and features in con-
ıction are sufficiently pronounced and perfect to enable one to arrive at the conclusion that they are the integumentary and muscular portions of adult human heads reduced to their present diminutive size. Besides, the general configuration of these idol heads resembles in an eminent degree that of the crania of ancient Peruvians, according to Dr. Morton, who thus states, "They are small, greatly elongated, narrow their whole length, and with a retreating forehead. The hair is uniformly long, lank, and appears to have been worn at full length by both sexes; its natural blackness is preserved, notwithstanding centuries of inhumation. I have seen, he says, some skulls of this race, which must have been naturally very long and low, yet in order to exaggerate a feature that was considered beautiful, compression has been applied until the whole head has assumed more the character of the monkey than the man." "These horizontally elongated heads found in the Peruvian cemetery of Arica, have a conformation prevalent among the old Aymara tribes which inhabited the shores and islands of Lake Titicaca, and whose civilization seems evidently to antedate that of the Inca Peruvians.

(*To be Continued.*)

Original Communications.

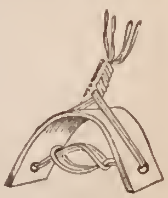
A SIMPLIFIED APPARATUS FOR THE RADICAL CURE OF VARICOCELE.

By JOHN H. PACKARD, M.D.,

DEMONSTRATOR OF ANATOMY IN THE UNIVERSITY OF PENNSYLVANIA.

Enlargement of the spermatic veins, if it exists to a marked degree, is an extremely annoying and troublesome affection. It is less amenable to palliative treatment than distension of the veins of the limbs, for obvious reasons, while there is not so much risk attending operations for its radical cure. I have not yet seen any statement in regard to the employment of metallic threads for this purpose, but am inclined to think that it will still further diminish the danger of such procedures.

The plan which I would lay before the profession is merely a modification of that proposed by Ricord, or rather a simplification of the apparatus described by him. My experience with it in a number of cases has been so successful as to induce me to offer it for the consideration of other surgeons.



The apparatus employed by me consists of a needle, a fine annealed iron wire, and a piece of sheet-lead. The needle is rather slender, two and a half inches in length, slightly curved near the point; its eye is near the point, and it is either set in a handle or headed so as to be firmly grasped with a pair of forceps. The lead plate is about an inch and a quarter in length, by half an inch in width; it has a hole bored through it near each end.

Having isolated the swollen veins in the usual way, I pass the needle, armed with the wire, behind them, and slip it back along one end of the wire, leaving the loop. Cutting off the long end of the wire, I now arm the needle again, and pass it in the opposite direction, in front of the mass of veins, through the same openings in the skin; it is then withdrawn as before, again leaving the loop. Each pair of ends is now passed through the other loop, when the mass of veins will be inclosed between the two double wires. Now, taking the lead plate, I pass the ends through the holes in it, draw them rather tight, and gradually twist them all together over the middle of the plate.

By twisting the collected ends of the wires once or twice every half minute or so, there may be gradually effected a most forcible constriction of the diseased vessels;

the twisting may be suspended when the pain caused becomes severe, or when the operator feels satisfied that the tissues must be cut by the wire if the pressure be further increased. Half-a-dozen additional turns, or more, may be daily made until the loops of wire have come together, which will be known by their looseness in the sinus formed by their passage. Now, by simply dividing them near one opening they may be drawn out by pulling on the longer end.

So slight is the pain caused by this operation that I have not yet found it necessary to resort to anæsthesia for its performance. But the point I particularly wish to draw attention to is the cheapness, efficiency, and simplicity of the apparatus as compared with that of Ricord. The security given by the twisting of the ends of wire, and the power it affords of gradually tightening the loop in any case, seem to me to be among the great advantages of metallic over other sutures.

CASES IN MILITARY SURGERY.

By DEWITT C. PETERS, Asst. Surg. U.S.A.,

IN CHARGE OF U. S. GENERAL HOSPITAL, STEUART'S MANSION, BALTIMORE, MARYLAND.

HYPERTROPHY OF THE MAMMARY GLAND IN A SOLDIER.

I.—G. W., private in a Regiment of N.J.V., was transferred and arrived at this hospital from Frederick, Md., March 7th, 1863. The history of this case, as gathered from the statements of the patient, is as follows:—About three years ago he was injured in a factory by being caught between some machinery and the wall of the building. He was severely contused about the chest, especially on the left side, and since the injury he has suffered from transitory pains in the left breast, yet they have not been so severe or lasting as to keep him from his accustomed work. He first noticed the left mammary gland enlarged nearly three months ago, and he has been under treatment for its relief. On examining the heart and lungs no abnormal sounds are detected. Indeed, on the contrary, they are remarkably healthy. The gland is very considerably hypertrophied and pendulous. No secretions are emitted from the nipple, nor does it give him pain to handle the parts. He says he has at times a dull aching pain in the gland, and then it becomes very much swollen and hard to the touch. The glands of the axilla are not involved, and the tumor has not the appearance of being either an abscess or cancerous in its nature. The general health of the patient is good, and otherwise he is a sound man. The treatment consists in giving the man alterative doses of iod. pot., while locally there is applied tinct. iodine and gentle pressure.

II.—*Extensive Gunshot Wound of Right Lung.*—Wm. Hatch, aged 20, belonging to the 5th Regiment Maine Vol., was transferred to this hospital March 7th, 1863.

The patient states that he was wounded at the battle of South Mountain, September 14th, 1862. His regiment was engaged with the enemy, and while thus employed he was fired at from above (on the side of the mountain) by a sharpshooter, whom he saw and estimated to be about sixty yards from him.

The ball struck him in the right breast, entered between the second and third ribs anteriorly, passed downwards and backwards (severely wounding the lung, judging from the history of the case), and came out between the tenth and eleventh ribs on the opposite side. The point of exit of the ball is nearly three inches below the lower angle of the right scapula, and it must have made a large opening, as the cicatrix is unusually extensive. The patient states that immediately on receiving the injury he fell, and that the hæmorrhage from the posterior wound was very free, causing him to faint. The surgeon who first saw him informed him that there was no chance of his recovery, and that in his opinion he had but a few hours to live. After his examination, he said, "you are shot through the lung and badly wounded." At each respiration the patient noticed that for some time afterwards the air passed in and out of the anterior wound, so much so as (to use the man's expressive language) "to give a whistling sound." He was also, from his description, troubled by circumscribed emphysema, which, however, the bandaging of the chest finally relieved and arrested. The wound was followed by extensive inflammation of the lung, as he could not take a long breath; expectorated freely bloody sputum for several weeks, was troubled with a racking cough, had high fever, and was at times delirious. Under good care he rallied and bids fair to fully recover.

Several small pieces of dead bone have come away from the anterior wound, which has now healed. The posterior cicatrix is drawn in and firmly attached to the upper edge of the eleventh rib, and it has also closed. Percussion over the injured side reveals some dulness along and below the track of the wound. By auscultation we find the vesicular respiration feeble, and it is more inclined to be bronchial. Egophony is present, indicating a moderate amount of effusion into the pleura, which has not been entirely absorbed. The patient walks about, is in good health otherwise, and has every prospect of soon being able to resume his duties in the field.

The curious feature in this case is the course of the ball, which must have traversed the lung from near its apex to its base. I am fully convinced in my own mind that the ball did not glance.

REPORT OF A CASE OF ERYSIPELAS OF THROAT, FAUCES, & TONGUE,

THREATENING SUFFOCATION, AND RESULTING IN RECOVERY BY THE STIMULATING TREATMENT, WITHOUT ANY PREPARATION OF IRON.

By B. Z. MILES, M.D., U.S.A.,

U. S. GENERAL HOSPITAL, ANNAPOLIS, MD.

C. H. Heart, private, company B, 3d New York Cavalry, admitted into this hospital January 8, 1863. For some days previous to entering the hospital, and when in Richmond, Va., held as a prisoner, he assisted in nursing a captain of the schooner Louisa Frazier, with erysipelas. His health had been good until a few days before he reached this place, when he was seized with a shivering, which was followed by fever and loss of appetite; at the same time he experienced some difficulty in swallowing. The right tonsil and uvula were then of a crimson-red color; there was much œdematous swelling of the uvula, with great pain; he suffered from faintness and sickness; pulse 86. In consequence of sleeplessness for some days I ordered pulv. ipec. et opii; and a gargle of zinc, capsicum, sulph. alum. et potas., and water. On the 9th, the day after admission, the erysipelas had not extended, and if any thing he was better; he took a little nourishment. As his pulse began to flag I ordered whiskey (one oz.) with beef-tea every hour, to be continued throughout the night. On Jan. 10th the same; but during the night the erysipelas extended down the throat. On my next visit (Jan. 11th), I found the patient breathing with some difficulty, as if there was a collection of mucus in the larynx and trachea. He suffered a good deal of pain, increased by pressure beneath the angle of the jaw, but not much in front over the anterior surface of the larynx. There is no enlargement of the glands of the neck apparent externally. His chief complaint is of difficulty of swallowing. When he attempts to swallow anything it seems to go the wrong way, and it appears as if it would suffocate him; he can swallow a little milk, but even that with considerable difficulty. When the food or fluid which he attempts to swallow gets to the back of the tongue, instead of being guided by the action of the faucial muscles into the pharnyx it seems to fall towards the glottis, excites a severe spasmodic cough, producing the feeling of suffocation, and is forcibly ejected partly through he mouth and partly through the nose. The voice affected, mounting to hoarseness, and nearly to complete loss of oice, with difficult stridulous inspiration. I ordered sulph. quiniæ, gr. x., beef-tea, three oz., as an enema every three ours, and nit. argentis, one drachm, aquæ, one oz., to the hroat, and such nourishing food as he could be got to wallow. At my request Surgeon T. A. McParlin, U.S.N., isited him with me. I suggested that if he grew any orse we should operate for tracheotomy. We agreed to ursue the treatment already commenced, and concluded hat the operation might prudently be postponed until four 'clock in the afternoon. On my next visit at that hour I ound the patient still breathing with much difficulty, but leglutition was easier, the pulse was falling, and fever was ess. At my next visit, nine o'clock P.M., finding the symptoms still improving, pulse less frequent, deglutition better, nd breathing easier, I began to hope that surgical means night not be necessary, and this hope was confirmed by the till improving character of the symptoms at the fourth visit, ate at night. On the following morning all the symptoms vere still better, deglutition had become comparatively easy, nd the breathing sufficiently free to remove all anxiety as egarded the risk of suffocation. The treatment had been teadily pursued through the night, notwithstanding much pposition from the patient. It was continued through the lay, omitting the enemata. During every visit that day ymptoms were still improving. My orders every night were hat he should not be allowed to sleep more than three ours without food. On my visit the next morning (Jan. 3th) he complained of his tongue, which I found much wollen, and on my second visit it had increased rapidly, so nuch so as to impede his swallowing, and to increase his lifficulty of breathing; pulse 90, but the breathing remained 28; gave directions to continue the enemata. On the third isit the same, and I again thought there was some risk of uffocation. Fourth and fifth visit the same. He passed a omfortable night, and was only disturbed by occasional fits f coughing. The next morning (Jan. 14th) he had some leep, and the pulse and breathing afterwards were 84 nd 24. Whiskey reduced to half an ounce every two ours. In the evening the pulse and respiration were 86 nd 24. During the two following days, the 15th and 16th, e continued remarkably well; pulse 90, and respiration 22. rdered magnes. sulph. On the 17th, still doing well; ulse and breathing were 80 and 24. By the 18th Jan., en days from the time he entered, he felt quite well, and his ppetite being good, he could eat perfectly. Discontinued timulants, and ordered ferri cit. et quiniæ three times a day.

I have to say, with respect to the treatment of erysipelas, hat it is necessary to give stimulants and nourishing food reely, and from the very commencement of the attack. Now, of all stimulants the alcoholic are the best, and I ave witnessed such remarkable effects produced by their ree exhibition that I am inclined to consider them as antilotes to the erysipelatous poison. I am of the opinion, with hospital well supplied with brandy, and simple means to eep the bowels open, that erysipelatous inflammation could e kept at a minimum among the soldiers of our army. Surgeons of the U.S. Army attach great importance to the use of the tincture of sesquichloride of iron in this disease, and I have no doubt that many cases, as they think, will get well under that drug. But I still believe there are many cases that will recover without any treatment. I am under this opinion, after having tried both plans of treatment, that the supporting plan is the best adapted to save life and check the progress of the disease; if you begin early and with decision you will seldom have to deal with the secondary phenomena of this malady.

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Dr. Clarkson T. Collins's Institution, at Great Barrington, Berkshire Co., Massachusetts, for the treatment of chronic diseases of females, is again opened. Dr. Collins closed it from the first of January to the first of April, for the purpose of allowing him to visit the hospitals of the army.

Progress of Medical Science.

PREPARED BY E. H. JANES, M.D.

PLURAL BIRTHS IN CONNEXION WITH IDIOCY.

An elaborate paper on this subject is contained in the *Medical Times and Gazette* for Nov. 15th, from the pen of Dr. Arthur Mitchell, Deputy Commissioner in Lunacy for Scotland. Having officially to examine and report on a large proportion of all the idiots in Scotland, and it being so frequently stated in the course of his inquiries that the patient was one of twins, he was led to suspect that there might be some connexion between plural births and congenital defects of the mind. Upon inquiry he found that of 443 idiots 11 were twin-born, or, in other words, every fortieth idiot was found to be one of twins. That this proportion is abnormal will seem apparent when we remember the mortality of twin-born children differs so much from that of single-born, thus diminishing the proportion of the actual population springing from the former, to that springing from the latter, when compared with the number of births respectively springing from twin and single conceptions. The statistics of the Dublin Lying-in Hospital show that of twin children one in 4·2 did not leave the hospital in life, while of the single born this was the case with one in 11, the deaths among the former being nearly three times as frequent as among the latter. The author's inquiries not only revealed the fact that many idiots are twin-born, but among their relatives there was a marked frequency of twin births, and also among the relatives of idiots who are themselves single-born the same peculiarity occurs. Thus, it was found that of 443 idiots 11 times the idiot was twin-born, in four cases one or other parent of the idiot was twin or triplet-born. 32 of the 443 mothers had borne twins once or more frequently; 43 of the families presented twins more or less frequently. These investigations, with the fact that the whole history of plural births is exceptional, in proving more fatal to the mother, in representing a larger proportion of dead-born children, premature deliveries, abnormal presentations, a greater amount of infant mortality, or feeble unequally developed children, convince the author that if some connexion between plural births and idiocy is not proved it is at least rendered highly probable. He thus concludes: "The fact that persons of very great intellectual and physical vigor are every now and then found to be twin-born, in no way interferes with the soundness of the *general conclusion* to which this research points, and the basis of which may be briefly stated as follows:—1. Among imbeciles and idiots a much larger proportion is actually found to be twin-born than among the general community. 2. Among the relatives of imbeciles and idiots twinning is also found to be very frequent. 3. In families where twinning is frequent, bodily deformity (of defect and of excess) likewise occurs with frequency. 4. The whole history of twin births is exceptional, indicates imperfect development and feeble organization in the product, and leads us to regard twinning in the human species as a departure from the physiological rule, and therefore injurious to all concerned. 5. When we pass from twins to triplets and quadruplets, everything we know regarding these latter gives support to the general conclusion in question."

COMMON RESIN AS A REMEDIAL AGENT.

A writer for the *Medical Record of Australia* has called the attention of the profession to the value of common resin in the treatment of gonorrhœa and gleet, in either of which it may be given alone or in combination with copaiba or cubebs. Its advantage over these remedies is, that it is readily made into pills, enabling the patient to take it regularly, generally effecting a cure in from fourteen to twenty-one days. It sometimes excites a nettlerash, or more frequently an irritable efflorescence or papillary eruption, to prevent which a warm bath is recommended, to be repeated every four or five days, or if this fails, three or four grains of iodide of potassium may be given three times a day. It often produces a frequent desire to pass water, and should this be accompanied with pain and tenderness in the kidneys and bladder, and deposits of large quantities of mucus in the urine, five or seven minims of laudanum may be added to each dose, and the patient be directed to sit as high as the navel in warm water for twenty minutes twice a day. Should this fail to afford relief the remedy had better be discontinued for a few days. The method of using it is, first, if the patient is young and plethoric, and the discharge is accompanied by marked inflammatory symptoms, to order saline purgatives, warm bath every other day, and to envelop the penis in lint wetted with acetate of lead and opium lotion, renewing it every three or four hours for three or four days, or until the severe scalding and swelling subside, and then the resin in five or seven grain doses every eight hours, either made into pills or as a powder, mixed with ten or fifteen grains of powdered gum acacia, and taken in wet sugar, milk, or any other fluid; and one tablespoonful acetate of lead lotion: ten grains to six ounces of water, with thirty grains of tincture of opium injected into the urethra three times in the course of twenty-four hours; when the pain has nearly disappeared, ten grains of acetate of zinc may be substituted for the acetate of lead; when the pain is slight, the chloride of zinc and resin may be at once commenced with.

Its efficacy in the winter coughs of old people, in combination with opium, belladonna, and squills, led the same writer to use it in hooping-cough with greater benefit than any other remedy that he has employed. He reports a number of cases of the latter disease, treated with resin in doses of from one grain upwards (according to the age of the child) three times a day. If necessary, an emetic of wine of ipecac was first given to clear the bronchial tubes. Opium, belladonna, hyoscyamus, antimony, calomel, digitalis, iodide of potassium, were occasionally employed in combination with the resin whenever the specific action of each or any of these several remedies was indicated.

Reports of Societies.

UNITED STATES ARMY MEDICAL AND SURGICAL SOCIETY, OF BALTIMORE.

Stated Meeting, Feb. 19, 1863.

SURGEON C. C. COX, U.S.V., PRESIDENT, IN THE CHAIR.

[Reported by Dr. Geo. H. Dare, Acting Asst. Surg., U.S.A., Secretary.]

ERYSIPELAS.

Dr. Hunt, Assistant Surgeon U.S.A., introducing the subject, remarked that he preferred simply to answer certain questions that would naturally present themselves in connexion with erysipelas, inasmuch as by that method he could more readily get at the points.

I.—Is traumatic erysipelas, in its essential and distinctive features, the same as common erysipelas? Very few diseases are both idiopathic and traumatic. We never have any other of the exanthemata excited by a wound, and yet we cannot but regard the idiopathic and traumatic forms as one and the same disease modified by circumstances. Dr. Hunt alluded to various facts as substantiating this view.

II.—Is it epidemic, contagious, or inoculable? It was shown that the weight of evidence goes to prove that it possesses each of these characters. A number of marked illustrative cases was detailed.

III.—Does erysipelas engraft itself upon other diseases, so as to modify them, and complicate the symptoms, without assuming its own especial characters? The testimony of Gross, Guthrie, Bennett, and other authorities, was referred to upon this subject, and its relations to puerperal fever and its power over serous inflammations noticed.

IV.—What are its relations to hospital gangrene? Dr. Hunt noted that the very language used by authors was in many points applicable to both. He remarked, that if distinct they had at least many points in common.

V.—How can erysipelas be prevented? The importance of thorough ventilation, general cleanliness without dampness, the use of the syringe in cleansing wounds, care as to cleansing instruments, allowing the wound to drain after amputation instead of a speedy co-aptation of the parts, the separation of affected patients, these and like points were illustrated and impressed.

Treatment.—The constitutional treatment of the disease was strongly insisted upon. The Doctor thought a stimulating emetic—such as ipecac and carbonate of ammonia—proper in the outset of the attack, and a cathartic of calomel and oil, not only for their general effect but as a means of promoting secretion from the whole mucous membrane, and thus preparing the way for the more active assimilation of nutrients and stimulants. The propriety of this initial treatment would depend upon the condition of the alimentary canal; very little catharsis was advisable in the advance of the disease. In this stage the Doctor recommended iron, quinine, stimulants, and nutrients. He thought that in bad cases, chlorate of potash, with the iron, was sometimes beneficial.

He recommended, as a local application, a poultice of flaxseed and cinchona bark to the wound, and the lead and opiate lotion to the surrounding parts. The value of punctures and incisions was discussed; the experience of the speaker had not corroborated the great importance ascribed to them by Guthrie.

E. G. Waters, Acting Asst. Surgeon U.S.A., stated that he had been at the National Hospital, in charge of the ward devoted to erysipelatous cases; that the treatment pursued by him, with almost uniform success, was a blister large enough to cover the whole inflamed surface, and to extend a little beyond. When applied early he had frequently succeeded in aborting the disease. When the wound was sloughy and unhealthy he had applied to it a poultice of bran and yeast. He had given stimulants, tonics, and nutritious diet internally. Under the above treatment of the large number of cases which had passed through his hands, he had lost only one or two. Dr. Waters reported several interesting illustrative cases: one of a man who had recovered from the fifth attack of erysipelas. His hospital experience had not corroborated the generally received opinion as to the contagious nature of the disease.

Surgeon Jones, U.S.V., reported the following series of cases bearing upon the contagious and infectious character of erysipelas, and also its connexion with puerperal fever. He once attended a robust blacksmith in a severe attack of erysipelas from a burn. An old physician was called in consultation, who bled the man; the same day he bled another man, who had received a fall, with the same lancet; that man subsequently had phlebitis and erysipelas. The same physician was called that night to attend a case of labor, and having occasion to bleed the woman used the same lancet. She was soon seized with puerperal fever, and came near losing her life. The three cases were in different neighborhoods, where no other similar cases existed. The blacksmith recovered; and soon afterwards his wife and three children, who had attended him during his illness, had mild attacks of erysipelas. There were no cases of the same disease in the town at the time.

L. Quick, Surgeon U.S.V., spoke of two cases of erysipelas which occurred at his hospital—1. In which the erysipelas affected the entire surface. It immediately preceded a squamous syphilide. The man recovered under the use of tonics, stimulants, and nutritious diet. 2. A case of traumatic erysipelas, from a gunshot wound of the right shoulder. The disease covered by degrees the whole surface. It was successfully treated by the external application of tr. iodine, and tr. ferri chlor. internally.

Wm. G. Smull, A. A. Surg. U.S.A., remarked that he had in his own person contracted the disease by accidental inoculation with the pus of phlegmonous erysipelas. As an illustration of the erratic nature of the disease, he remarked that during an epidemic in the hospitals on East River, New York city, he had seen a case where the disease affected the skin covering the neck. The patient at the time was walking about. In two hours he died with symptoms of acute meningitis. An autopsy revealed intense congestion of the meninges of the brain. In the epidemic alluded to the physicians found that an application of collodion ℥j., with tr. ferri chlor. ʒj., applied as fast as shrinking of the skin was discovered, together with tr. ferri chlor. gtt. xxx. every third hour, was the most successful mode of treatment.

DOUBLE AMPUTATION OF THE LEGS.

The President, C. C. Cox, Surgeon U.S.V., reported—A Case of Double Amputation of Legs, performed by him. He gave the following history:—A colored girl, æt. 16 years, having enjoyed always before uninterrupted good health, was taken with typhoid fever, of a low asthenic type; there was no organic complication. The case being under the medical charge of Dr. Wilson, Dr. Cox did not see it until called in consultation. During convalescence a narrow line of mortification had appeared above the ankles, extending entirely around, and leaving both feet in a state of gangrene. It was determined to remove both legs at the point of election. This was done by Dr. Cox, in the presence of, and assisted by, Drs. Waters, Wilson, and Thomas, of the city, and Surgeons Quick and Bliss, of the army. The patient was placed under the influence of chloroform, and by means of Dr. Waters's improved tourniquet, pressure was confined to the main artery, and the amount of hæmorrhage, therefore, was very trifling, compared with that which almost always occurs from the venous congestion produced by the old instrument. The stump was dressed with cold water dressings, with very light wrappings. The patient was also ordered to continue her iron and stimulants, and to substitute ale for the alcoholic drinks previously used. On the fifth day the stumps were exposed; one was found healing by the first intention, the other partially so.

GUNSHOT WOUND OF THE CRANIUM FOLLOWED BY AN ABSCESS OF THE BRAIN, CAUSED BY THE PRESENCE OF THE BULLET, RESULTING IN DEATH TWO MONTHS AFTER THE RECEIPT OF THE INJURY.

Dr. Geo. W. Dare, Acting Asst. Surg. U.S.A., next gave the following history of a case of gunshot wound of the skull.—Geo. W. Shone, Corporal, Co. A, 12th Mass., æt. 29 years, wounded at the battle of Fredericksburg, Dec. 13, 1862, was admitted into the U.S. Army General Hospital, Camden st., Balt., Dec. 19, 1862. His right eye had been destroyed, as he stated, by a glancing shot. The lower lid was slit to a small extent; the eye was suppurating. He did not complain of much pain. The functions of the other eye were not disturbed, but it was observed to be unnaturally prominent. There were no brain symptoms, except some headache. Neither the patient nor the surgeon suspected that the ball remained in. The wound healed kindly within the ordinary time. After two or three weeks the man went out habitually on pass through the city. He continued well, with the exception of an occasional pain over the remaining eye, until Feb. 6th, 1863, when he was found by Dr. D. in bed, having had a chill, followed by fever. The fever assumed a continued form, with occasional chilliness. He remained cheerful, sitting up at times, and did not manifest any serious symptoms until the night of Feb. 10th, when he became delirious. The nurse then reported that he had wandered a little during the two preceding nights, but during the day he had appeared perfectly sensible. Feb. 11th.—He was found comatose; the left pupil greatly dilated; intelligence not entirely abolished; he would sometimes answer a question or put out his tongue when ordered; the vesical sphincter had been involuntarily relaxed. Cupping and blistering were employed without benefit. He sank rapidly, and died about twelve o'clock at night. An autopsy was held on the following day. Upon removal of the calvarium, the pia mater was found much congested, and a considerable quantity of dark fluid blood escaped from the torcular herophili. When the anterior cerebral lobes were lifted a minié ball was seen lying transversely, half embedded in the sphenoid bone, between its greater and lesser alæ, the concave extremity half way between the crista galli and the sella turcica. A portion of the ball rested against and pressed on the thin inner wall of the left orbit, thus diminishing its capacity, and forcing forwards the eye; this fact explained its unnatural prominence observed during life. The missile had, after passing through the eye, entered the cranium through the inner wall of the right orbit, at the junction of the sphenoid and the ethmoid bones. The ball did not penetrate the dura mater, but remained in contact with, and pressing against it. In consequence of this pressure, ulceration of that membrane resulted, and an abscess formed, extending from the point of contact to the left lateral ventricle, containing several drachms of pus. A few drops of pus, apparently encysted by lymph, were discovered pressing directly the commissure of the optic nerve, which was the probable cause of the extreme dilatation of the pupil. The pons varolii and the medulla oblongata were found bathed in pus.

The Doctor observed that the remarkable feature of this case was, that symptoms of cerebral injury did not manifest themselves until about seven weeks after the receipt of the wound. The immediate cause of death appeared to be the formation of pus, indicated by the ordinary symptoms—a chill, fever, etc., resulting from the inflammation excited by the presence of the bullet, which may be considered as the remote cause of the fatal result.

FOREIGN CORRESPONDENCE.

LETTER XXXI.

By PROF. CHARLES A. LEE.

NURSE-TRAINING INSTITUTIONS.

Vienna, October 12, 1862.

Among the numerous signs of the advanced civilization of our age, the improved condition of hospitals may be ranked as one of the most prominent and important. In the large towns and cities of Great Britain and the continent they form a striking feature. For the most part they are well situated, and in many instances, perhaps a large majority of those recently constructed, the interior arrangement admits of everything that can conduce to restoration of health. No stranger can walk through them without being struck by the cleanliness and ventilation which is almost universally to be found. This is especially the case in regard to the London hospitals, the Laboricière and some others in Paris, and indeed many of the hospitals I have visited in France, Switzerland, Germany, Prussia, and Austria. There were, however, many exceptions to this general rule. In some instances they are placed in unhealthy localities, in others the buildings are old palaces or chateaus, or even castles, with no possibility of suitable adaptation to the purposes to which they are now devoted; in many there is no attention scarcely paid to proper ventilation, cleanliness, and warming; and in most there is certainly too little regard paid to the character and qualifications of nurses. As this is an important part of our subject, and one which needs more attention and no little reformation in our own country, I may be permitted, perhaps, to dwell on it at some length.

The want of suitable nurses, such as might convey spiritual and moral instruction, while they attended to the ordinary duties of their calling, led to the establishment of a *Deaconess Institution* at Kaiserswerth on the Rhine in 1836, by Bastor Fleidner. This Mother-House, or Pastoral Institution, contains within its precincts seven branch institutions, which were established by degrees for the purpose of training the probationers: 1, *a hospital*, with 120 beds; 2, *a lunatic asylum*, for females only; 3, *an infant school*, admitting children of all creeds; 4, *an orphan asylum*; 5, *a day school* for girls, also attended by the orphans; 6, *a normal school* for infant, elementary, and higher girls' schoolmistresses, as well as for nursery and other governesses; all these have been carried on most successfully by these deaconesses, as well as, 7, *a penitentiary*, for released female prisoners and Magdalens. These branch institutions contain more than 500 inmates at the present time, and are carried on in all their departments in a very admirable manner by these devoted females, aided only by five male nurses in the men's wards. Each department has its superintending sister and one deaconess, who has the title of "mistress of the probationers," and has special charge of the probationers, all under the direction, however, of Mr. Fleidner, who acts as chaplain. There is also an assistant chaplain, one or two masters, and a physician and surgeon connected with the institution. The pecuniary management is under the charge of Mr. F. and a committee of gentlemen, while the whole is under the superintendence of the Synods of the Rhineland and Westphalia. I need hardly add that the probationers have to go through a course of practical instruction in each of these branch institutions during their term of probation, with the exception of the seminary for schoolmistresses, wherein those only attend who are to become instructing deaconesses, and their term of probation is, consequently, much longer than that of the nursing sisters. This institution has served as a germ for which many of a like kind have originated, as at Paris, Strasburg, St. Loup, Dresden, Utrecht, Berlin, Breslau, Konigsberg, Stettin, Stockholm, Ludwigshist, Carlsruhe, Riehm, and at Pittsburgh in Pennsylvania, etc. These have all been formed on the model of that at Kaiserswerth, chiefly as training institutions for nurses. Several hundred of these religious, educated, and accomplished nurses have gone out from the present institution to different parts of Europe, Asia, and America, since it was founded, twenty-six years ago, and still larger numbers from the other establishments founded on the same plan. I meet with them frequently in the different hospitals, where they are accomplishing great good and exerting a most happy influence, while in other instances we find hospitals under their sole charge. For example, while at Berlin I visited the Bethanie Hospital, founded by the King of Prussia in 1847, and who erected the large and beautiful building known under this name, in the outskirts of the city. This is one of the finest hospitals in Europe, with 300 beds, constructed with moderate sized wards, after the latest and most approved models, with every convenience for warming, ventilation, laundry, cooking, etc. He endowed it with a sum of £7,500, by which twenty free beds have been founded, and several other persons have followed his example, so that a majority of the beds are free foundations, while the rest are supported by voluntary contributions. This admirable institution was opened in October, 1847, by nine Kaiserswerth Deaconesses and their Superior Baroness de Ranzau, who had also gone through the usual training at Kaiserswerth. A Countess, a most intelligent, highly educated, and accomplished lady, the *head nurse*, if I may so call her, conducted me over every part of the establishment, and explained to me all the details connected with the management. She stated that only nursing sisters were trained here, who go out to other hospitals as they become qualified, and thus the good work goes on. In this connexion, I may refer to the Deaconess Institution at Pittsburgh, founded by the Rev. M. Passavaut in 1849, after the model of that at Kaiserswerth, connected with a hospital of forty beds and an orphan asylum. Many accomplished nurses have gone forth from this institution, but it has not been able to supply a tithe of the number wanted, and it is greatly to be desired that other training institutions of a similar kind should be established where females who desire to make themselves useful in this important and arduous vocation, may have an opportunity of acquiring the necessary qualifications. I fear, however, from the very slow progress which these institutions have made in the United States, that our Protestant women are not particularly disposed to the self-denying work of a deaconess. Certain it is that the Catholic order of the Sisters of Charity have displayed far more zeal and self-denial in their devotion to the sick, in our country, than has been exhibited by our Protestant females. Since our present war broke out, however, it must be acknowledged that a new spirit has been awakened, and that a good degree of zeal and patriotic self-devotion has been exhibited by large numbers of the sex, who have cheerfully come forward and offered their services as nurses for our sick and wounded soldiers. This is worthy of all praise; and had their knowledge equalled their zeal they would have accomplished far more good than has actually resulted from their labors. But nursing, like other occupations, requires previous training, and those who suppose that such knowledge is intuitive, or can be acquired in a few days, will find that they have formed very erroneous notions. Services rendered to the sick can only be properly administered by those whose vocation it is, who have had special training, and who do it in a spirit of love. If such could be obtained, there would be no further doubts or dispute in regard to the usefulness and superiority of female over male nurses.

From all I can learn I suppose there must be from twenty to thirty training institutions for female nurses in Europe at the present time, all founded on the plan of that at Kaiserswerth; while in the whole United States I am not aware that there are more than one or two. We have plenty of voluntary female nurses offering their services, but no institutions scarcely where they may acquire the previous necessary qualifications. When we consider the soothing, calming, cheering, humanizing influence of woman, and reflect that attendance on the sick is, in an eminent degree, a work of faith as well as of love, how can we doubt that this is a work, not only well worthy to be followed by Christian women, but one which can be discharged with far more success by their ministrations than by those of our own sex? While all acknowledge the desirableness of enlarging the sphere of female usefulness and employment, there are but few who are ready to admit that our benevolent institutions should be committed to their charge. But it seems to me that this is their special sphere. The nursing of the sick, both of males and females, should be committed to properly instructed women, as a general rule—special cases may form exceptions. Orphan asylums, houses of refuge, insane asylums, special and general hospitals, etc., can all be managed as well, if not better, by women than by men. They have more time to devote to such matters, and there are many who, whether widows or unmarried, have no special claims on their time, nor, indeed, any particular object in life, and whose happiness would be greatly increased by such a sphere of useful activity. How much time is devoted by our present governors of hospitals and almshouses, trustees of dispensaries, and managers of insane institutions, etc., to promote the spiritual and physical well-being of those committed to their charge?

One of the largest of these deaconess institutions is at Strasburg in France. It was founded in 1842, and has trained up a large number of exceedingly useful and devoted nurses as well as teachers. The establishment embraces a hospital, an infant school, a penitentiary, and a refuge for criminal girls. The sisters also nurse the sick in private families, and visit and attend the poor and the sick in the town. The hospital contains twenty-seven beds; all the nursing is done by the sisters, as well as the dispensing; the management is committed to a board of ladies, not deaconesses; and the only person about the establishment who is paid for his services is the gardener; a certain yearly allowance is, however, made for dress. The utmost kindness and quietness of manner and deportment is exhibited by all, while the greatest neatness, order, and quiet everywhere prevail. The institution seems more like a private dwelling than a public hospital. The physicians reside outside the building. During the last year 205 patients were treated, and seventeen deaconesses employed and trained. They are not required to make any vows, though they wear a particular dress; proselyting, also, is not permitted.

The University Hospital of London is now entirely supplied with nurses from the Protestant Sisterhood, as is also King's College. There is also a hospital at Mulhouse of 250 beds, where the nursing and dispensing are entirely done by deaconesses from Strasburg; attached to it is a venereal ward, and one for the insane or those suspected of insanity, who are sent to an asylum as soon as the disease is sufficiently developed. Day-patients pay from one franc to two and a half francs per day, according to accommodations. Some of the patients are supported by the government, others by charitable collections. This is one of the best managed hospitals in France, and is wholly served by the deaconesses. Out-door relief to the sick poor of the town is very efficient. The town is divided into districts of about 6,000 inhabitants in each, and in each district a small house of five or six rooms is hired; a physician is appointed for each district who attends the station twice a week or oftener, to prescribe for all who may need advice. One of the deaconesses resides in, or stops in the house during the day, to receive calls and give advice, etc. She keeps a good stock of jellies, fruits, arrow-root, rice, tea, etc.; also warm soup for all who need. She visits the patients who are attended by the physician at their houses, sees to the administration of the medicines, application of leeches, and a supply of all needed comforts. In this way none suffer from neglect; there is no waiting for hours at the dispensary or hospital; the medicines are properly disbursed and distributed; food, often more needed than medicine, is supplied; fruit and other luxuries furnished; useful advice given; a salutary moral influence exerted, and the comfort, happiness, and health of the patient promoted. The deaconess institution at Dresden, which was opened in 1844, is in quite a flourishing state at present, and has sent out a large number of nurses. As it was founded by a countess, so countesses and other ladies of rank do not hesitate to enter it in order to qualify themselves to act as nurses. I might describe various other institutions of this kind with which I am acquainted, as at Richen, near Basle, in Switzerland, which has nearly one hundred trained nurses employed in different hospitals in various parts of the continent. This is conducted, perhaps, in a less ecclesiastical manner than some of the others, for it has a joint committee of ladies and gentlemen in its board of management. I believe there are no institutions of this kind in England, except one in London, which has opened during the last year. Whether it is practicable to introduce them more extensively in the United States I leave to others to judge.

The Hospitals at Helena.—There are now about 1000 sick soldiers in Helena, many of them convalescent, occupying four of the churches as hospitals, several other large buildings, and the old camp or barracks of the 13th Illinois Infantry. These hospitals are now under excellent management. The Post Surgeon, Dr. C. G. Pease, is a man of great executive ability, of high attainments in his profession, of humane sentiments, and withal a Christian gentleman. He has had a large amount of labor and responsibility thrown upon his hands, but is untiring in his efforts, and has made every arrangement for the sick of the advancing army (left behind) to be taken care of in the best manner. His arrangements are excellent, and he is no longer hampered by red tape. These hospitals are also provided with experienced nurses, some of them women, and are visited from time to time.

American Medical Times.

SATURDAY, APRIL 25, 1863.

VIRCHOW AND NÉLATON.

Political events have brought prominently before the world the names of Virchow and Nélaton. It is not to compare their respective individual merits that we have placed their names in juxtaposition, but to inculcate a lesson which the present position of these representative medical men suggests.

The medical profession is, for the most part, committed to the belief that its duties are limited to the healing of the sick. If a physician directs special attention to any other subject, he is regarded as departing from his legitimate duties, and in a certain degree abandoning his profession. A known devotion to any branch of the physical sciences, or to literature, is most damaging; but if he engage, however remotely, in any secular business, he is at once "read out" of the profession. We lately heard Prof. Simpson of Edinburgh pronounced "lost to the profession" by a half score of medical gentlemen, because he had addressed his class of medical students on their religious interests. But on no subject is there such a unanimous opinion in the profession as that a medical man is lost if he gives his attention to political questions. Medical and political science are regarded as so entirely incompatible, that the pursuit of one is thought to disqualify for the pursuit of the other.

We believe, however, that a just code of medical ethics would comprehend a much wider field of duties than is generally understood. It should measure the competency of physicians on all questions which concern humanity. Man is the object of all our study; all his interests are within our scope; everything that can ameliorate his moral as well as physical condition, falls within our domain. Consequently, medicine is one of the tributaries of social science or general politics. Times are long passed when we were confounded with barbers and servants, and when army surgeons or physicians were considered little above the mercenaries employed *á la suite* of armies. Remnants of the humiliation of science in barbarous times can still be traced in the ordinances of European armies. But science is now fast dispelling those clouds even there, while in this country the medical profession is taking a high and most influential position in society and in the state. The question which we wish to urge is—Shall that influence be extended at all times, and under all circumstances, for the advancement of man's social and political, as well as physical welfare?

We have in the persons whose names head this article remarkable illustrations of the views which divide the medical public. Virchow, the most distinguished representative of our profession, the leading medical mind of Europe, is a member of the Prussian Chamber of Deputies. He accepted unhesitatingly an election by the people, and is the leader of the liberal party. He has not forsaken his profession, but is as much absorbed as ever in his histological investigations. The medical sciences have not lost an ardent cultivator, while the cause of popular liberty and of human rights has gained an earnest advocate. Nélaton, the distinguished French surgeon, was recently offered a nomination for a seat in the French Parliament by the working classes, but he declined the honor. He alleges in justification of his conduct that he was only a surgeon, and could not on that account have legislative abilities.

No liberal mind can doubt which of these two medical gentlemen has done his duty, and accepted all the high trusts which have been committed to his care, whether as a citizen or as a medical man. Virchow is adding new lustre to a fame which is already world-wide, and of dazzling brilliancy. His name will be recorded high on the roll of those legislators who have advanced the civil and political interests of the people. Nélaton has failed to prove himself endowed with those great qualities of heart which distinguish Virchow. In declining the proffered appointment of the people he allied himself with the aristocracy, which ignore the claims of the laboring classes. As a surgeon he was ready to probe the wounds of Garibaldi; but taken from this sphere, he was but the most ordinary citizen.

We rejoice in the example which Virchow has placed before the profession of Europe, and trust its influence will be felt in the United States. Here, where a Republican form of government renders even the humblest talent useful, and gives it a proper weight in the social and political scale, medical men should accept official positions of trust. We cannot too often repeat the instructions of Rush:—" In modern times, and in free governments, they (physicians) should disdain an ignoble silence upon public subjects. The American Revolution has rescued physic from its former slavish rank in society. For the honor of our profession it should be recorded, that some of the most intelligent and useful characters, both in the cabinet and in the field, during the late war, have been physicians."

THE WEEK.

The Legislature of New York have passed the following law, entitled :

An Act to provide additional means of relief for the sick and wounded soldiers of the State of New York in the United States service.

Section 1. The governor of the state is hereby authorized to appoint suitable persons as agents of the state, whose duty it shall be to provide additional means of relief for the sick, wounded, furloughed and discharged soldiers of this state, who shall have been, are now or may hereafter be engaged in the United States service, while being transported to and from their homes; to ascertain the names and condition of all patients belonging to this state, in the United States hospitals, within such limits as the governor may designate; to keep a register of the same, and to furnish information to all who make inquiry concerning them; to facilitate the removal of the bodies of deceased soldiers to the friends of such deceased, when such action is desired, and to perform such other duties for the relief of the sick and wounded soldiers of this state as the governor may designate and require; to make reports to the governor of his or their transactions and expenditures, with vouchers duly verified on oath. The compensation of said agents to be fixed by the governor.

§ 2. The governor may appoint such number of surgeons, or other agents, as from time to time may be required, for the care, comfort and removal of the sick and wounded soldiers belonging to the state of New York. The compensation of such agents shall be commensurate with the services rendered, and to be fixed by the governor.

§ 3. The sum of 200,000 dollars, or so much thereof as may be necessary, is hereby appropriated for the purpose of carrying this act into effect, and the same shall be paid out of any moneys in the treasury not otherwise appropriated, to be paid on the order of the governor and disbursed under his directions, for the purposes aforesaid; the governor to account to the comptroller for the money that shall be expended in pursuance of this act.

§ 4. The comptroller of the state, on the order of the governor, is hereby authorized and directed to pay such accounts for services rendered, or disbursements made under this act, as, after being verified on oath, and audited in the same manner as other military accounts, shall be approved by the governor, and he is further authorized on the written order of the governor to place in the hands of the agents of the state such sums of money as may be required to meet the foregoing requirements, at the discretion of the governor, first requiring the said agents to give ample security for a proper disbursement of the funds.

§ 5. This act shall take effect immediately.

This act is very different from that which we formerly published. It is indeed free from most of the objections to the original bill, and if its provisions are wisely carried out it may be productive of much good. Some of the duties specified are already well discharged, and will not require the aid of this agency. As, for example, the keeping of a register of the New York soldiers for the purpose of furnishing information to all inquiries concerning them. The Sanitary Commission's Hospital Directory completely covers this ground. The success of the measure will depend upon the character and efficiency of the agents selected. We trust Surgeon-General Quackenbush will use his influence in securing competent agents.

A case was recently tried in England, which illustrates the danger of treating uterine diseases without the presence of a third party when examinations are made. A London contemporary has the following very just reflections on the case:

" These statements, without accepting them as facts, we affirm deserve the careful consideration of every man in practice. As a matter of prudence—we take the lowest ground—in all such operations medical practitioners should insist on the presence, in the same or an adjoining open room, of some lady friend. It is not requisite that in every instance she remain by the side of the patient. Consider the possible consequences of neglect of such an arrangement. We have recently had occasion to lament the facility with which the most serious, though groundless, charges can be advanced, and to deplore the ease with which very harmless conduct may be misconstrued. Suppose, in the present case, Mrs. Stone was not a married woman, but a needy, unscrupulous adventurer, and Mr. Appleton a married man in metropolitan practice; how easy for her, were she so disposed, for the purpose of extortion, to trump up any charge against her medical attendant, and, perhaps, find not only ears inclined for its adoption, but funds available for its prosecution. Take another view, and grant that, forgetful of their mutual obligations, both yielded to the temptations of time and opportunity: when discovery ensues, what a grave aggravation attaches to the offence if circumstances appear to justify an unfounded charge of this worst possible form of felony! Or, again, suppose the case of a woman committed to detection, yet wishing to screen her paramour; how easy for her, from an attendance of this nature, to trump up a charge of seduction, if not rape, almost impossible to refute! It is well for medical practitioners to be fortified by circumstances as well as conduct. It is due to themselves, if not to their profession, that they hold as a maxim that precaution is something distinct from timidity, and that the exercise of a sound discretion implies generally the greatest boldness as well as the truest delicacy."

THE sanitary inspection of the General Hospitals of the army by the Sanitary Commission is progressing most favorably under the supervision of DR. HENRY G. CLARK. By the second report we learn that special inspectors have visited nearly all the hospitals in the east and west, and reported fully upon them. The inspectors are medical men well known for their knowledge of hospital management, and the visits of such men can but exert a salutary influence upon the hospitals which they examine. DR. CLARK speaks encouragingly of the condition of the hospitals. Abuses have been remedied, defects have been supplied, and a spirit of emulation has been excited among the Surgeons-in-Charge. This special inspection will, we hope, become a permanent department.

Reviews.

CLINICAL LECTURES ON THE DISEASES OF WOMEN AND CHILDREN. By GUNNING S. BEDFORD, A.M., M.D., Prof. of Obstetrics, the Diseases of Women and Children, and Clinical Obstetrics, in the University of New York. Eighth edition, carefully revised and enlarged. New York: William Wood. Pp. 670.

PROF. BEDFORD may well congratulate himself on the success of his obstetrical works, if the frequent issue of successive editions is to be taken as a test of their popularity. This volume has averaged a new edition annually. It has also received the high compliment of a translation into the French and German languages. No American medical work has been equally honored within our recollection. The present edition contains an additional chapter on Cancer of the Uterus.

A THEORETICAL AND PRACTICAL TREATISE ON MIDWIFERY, INCLUDING THE DISEASES OF PREGNANCY AND PARTURITION, AND THE ATTENTIONS REQUIRED BY THE CHILD FROM BIRTH TO THE PERIOD OF WEANING. By P. CAZEAUX. Third American, translated from the sixth French edition, by Wm. R. Bullock, M.D. With one hundred and forty illustrations. Philadelphia: Lindsay & Blakiston. 1863. Pp. 971.

THE call for repeated editions of this elaborate and most excellent work, gives gratifying evidence of the advanced state of obstetrical science in this country. This treatise has long been popular in France as the principal text-book. Every question in theoretical and practical midwifery is fully discussed, and the rules established for the guidance of the practitioner are based upon the most enlightened views of physiology and pathology. The work cannot be too strongly recommended to the American student and practitioner.

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DR. W. W. NASSAU, as Assistant Surgeon of the Iowa Second, distinguished himself at Donelson, and for efficient services there, and at Shiloh, was promoted to Brigade-Surgeon, and ordered to New Mexico. From exposure on the field of Shiloh his health was so impaired that he was ordered back from New Mexico. After a short sojourn in St. Louis he was again ordered to New Mexico, but his health not permitting his return thither he sent on his resignation. The facts not being properly understood by the Surgeon-General he was dismissed the service. Afterwards, upon a proper understanding of the case, the President has revoked the order dismissing Surgeon NASSAU, and accepted his resignation. This explanation is but justice to a highly deserving gentleman, efficient officer, and true man.

Army Medical Intelligence.

GENERAL ORDERS, No. 69.

WAR DEPARTMENT, ADJ. GEN'L'S OFFICE,
WASHINGTON, March 20, 1863.

PARAGRAPH 10 of General Orders, No. 36, of 1862, which authorizes the chief medical officer in each city "to employ as cooks, nurses, and attendants, any convalescent wounded or feeble men, who can perform such duties, instead of giving them discharges," is hereby modified as follows:

At every U. S. General Hospital the feeble and wounded men, unfit for field duty, but not entirely disabled, instead of being discharged, will be organized and mustered in detachments, under the charge of the officers acting as Military Commanders, who will assign men to them from time to time, on the reports of the surgeons in charge of hospitals. From these Invalid Detachments the Military Commanders will make details for provost, hospital, and other necessary guards; for clerks, hospital attendants, nurses, cooks, and other "extra-duty" men.

The Invalid Detachments will be mustered and reported as detachments, and will be paid on the Detachment Rolls; but no *extra* pay will be allowed in any case.

The Detachment Rolls must show to what company and regiment each man properly belongs, and all assignments to them must be promptly reported to their company commanders. They are not to be dropped from the rolls of those companies, but will be reported on detached service from them.

Should any of the men become fit for duty with their regiment, they will be immediately sent to join them.

In case of a want of non-commissioned officers to give efficiency to the Invalid Detachments, lance appointments may be made, but without increase of pay.

By order of the Secretary of War:

L. THOMAS,
Adjutant-General.

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GENERAL ORDERS, No. 80.

WAR DEPARTMENT, ADJ. GEN'L'S OFFICE,
WASHINGTON, March 31, 1863.

IT is hereby ordered that all Surgeons and Assistant Surgeons belonging to regiments, who are absent on any other than regimental duty, shall without delay rejoin their regiments. Medical officers of regiments will not hereafter be detached upon other service, except temporarily in cases of necessity, or where the Surgeon and two Assistant Surgeons are present, when one of the Assistants may be detached to hospital duty.

By order of the Secretary of War:

E. D. TOWNSEND,
Assistant Adjutant-General.

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CIRCULAR NO. 13.

MED. DIRECTOR'S OFFICE, MIDDLE DEPT., 8TH ARMY CORPS,
BALTIMORE, Md., March 31, 1863.

WHEREAS it is inconsistent and inappropriate that a Military institution established by the National Government, and devoted to the care of its sick and wounded, should be called by a name that is now and must hereafter be prominent only in its association with rebels and rebellion, it is hereby announced that from this date the United States Army General Hospital known as Steuart's Mansion shall be designated as the Jarvis General Hospital, in tribute to the late Surgeon Nathan S. Jarvis, U. S. Army Medical Director of this Department, the memory of whose virtues as a man and excellence as an officer has not died with him.

J. SIMPSON,
Surgeon U.S.A., Medical Director.

CIRCULAR NO. 18.

Med. Director's Office, Middle Dept., 8th Army Corps,
Baltimore, Md., April 5. 1863.

The Surgeon-General having approved the suggestion to designate the General Hospital at Chestnut Hill, Philadelphia, by the name and in commemoration of the distinguished and lamented Surgeon Thomas G. Mower, of the Army: It is hereby announced, that, in tribute to the memory of one to whom the Medical Department of the Army owes so much of its present position, who purified its ranks, elevated its standard, and rendered his own name synonymous with the character of the corps, this institution shall hereafter be known as the Mower General Hospital.

J. Simpson,
Surgeon U.S.A., Medical Director.

SPECIAL ORDERS, No. 143.

War Department, Adj. Gen'l's Office.
Washington, March 28, 1863.

10. Leave of absence is hereby granted to the following officers:
Chaplain F. A. McNeill, U.S.A., for thirty days.

11. Assistant Surgeon Louis Kline, U.S.V., an illegally appointed officer, having tendered his resignation, is mustered out of service from date of appointment, there being no evidence of muster in, or of service rendered by him to the Government.

17. The following assignments to duty are made of Medical Officers:

Surgeon I. Moses, U.S.V., now on duty at the Finley Hospital in this city, to report in person to the General commanding Department of the Cumberland, and report by letter to Assistant Surgeon-General Wood at St. Louis, Mo.

Surgeon G. B. Twitchell, U.S.V., to report in person to the General commanding Department of the Tennessee, and report by letter to Assistant Surgeon-General Wood at St. Louis, Mo.

Surgeon O. M. Bryan, U.S.V., now on duty at La Mesilla, Arizona, to the General commanding Department of New Mexico, for duty as Medical Director of that city.

Surgeon J. M. McNulty, U.S.V., to report for duty to Surgeon O. M. Bryan, U.S.V., Medical Director, Department of New Mexico.

Surgeon James W. Fitzpatrick, U.S.V., to report for duty to 'Surgeon R. O. Abbott, U.S.V., Medical Director in this city.

Surgeon John Neil, U.S.V., to report for duty to the Medical Director at Philadelphia, Pa.

Assistant Surgeon J. C. Baily, U.S.A., as soon as examined for promotion, to report to the Medical Director at Fort Monroe, Va., to relieve Assistant Surgeon D. L. Huntington, U.S.A.

Assistant Surgeon John T. Riley, U.S.A., at the expiration of his leave of absence, to report in person to the Medical Director at St. Louis, and by letter to the Assistant Surgeon-General.

The following officers to report for duty to Surgeon R. O. Abbott, U.S.A., Medical Director in this city.

Assistant Surgeon Wm. A. True, 25th Maine Vols.
“ “ Chas. Cross, 27th Maine Vols.
“ “ A. M. Plant, 14th Vermont Vols.
‘ “ Rud. Ribbeck, 29th New York Vols.
“ “ A. G. Coleman, 2d Pennsylvania Reserve Corps.
“ “ S. M. Goof, 5th Pennsylvania Reserve Corps.
“ “ W. C. Buckley, 10th Pennsylvania Reserve Corps.
“ “ A. J. Cole. 11th Pennsylvania Reserve Corps.
“ “ J. H. Alexander, 153d Pennsylvania Vols.
“ “ C. D. Brook, 26th Michigan Vols.
“ “ Jas. W. Grosvenor, 11th Rhode Island Vols.
“ “ Philip S. P. Walker, 2d Pennsylvania Cavalry.
“ “ Elmer J. Hall, 1st Vermont Cavalry.
“ “ S. W. Ward. 152d New York Vols.
“ “ H. H. Mitchell, 39th Massachusetts Vols.
“ “ Frank C. Weeks, 14th New Hampshire Vols.

Acting Assistant Surgeon A. N. K. Andrews, Abercrombie's Division.

Surgeon W. M. Breed, U.S.V., now on duty at Philadelphia, Pa., to report for duty to the Medical Director, Army of the Potomac.

Assistant Surgeon R. D. Lynde, U.S.V., now on duty in the Medical Director's Office, New York city, to report in person to the General commanding the Department of the Cumberland, and by letter to the Assistant Surgeon-General at St. Louis, Mo.

Hospital Steward Hugh Ryan, U.S.A., is hereby honorably discharged the service of the United States, to enable him to accept the position of Assistant Surgeon 34th Kentucky Vols.

34 Paragraph 7, Special Orders No. 121, current series, War Department, assigning Assistant Surgeon Huntington, U.S.A., to duty in the Department of the Tennessee, is hereby suspended until Assistant Surgeon Huntington is relieved by another officer.

42. The Medical Officers detailed from each Corps of the Army of the Potomac by Special Orders 89, current series, War Department, and assigned to duty at the Convalescent Camp near Alexandria, Va., are hereby relieved, and they will report for duty without delay to their respective Corps.

By order of the Secretary of War,
E. D. Townsend,
Assistant Adjutant-General.

Assistant Surgeon C. H. Alden, U.S.A., has at his own request been relieved from duty in the Office of the Surgeon-General, and has relieved Assistant Surgeon E. S. Dunster, U.S.V., in charge of the General Hospital at Turner's Lane, Philadelphia, Pa., and as member of the Army Medical Board, in this city. Assistant Surgeon Dunster has been assigned to the duties lately performed in the Surgeon General's Office by Dr. Alden.

Surgeons A. C. Bonrnonville, D. H. Agnew, Wm. M. Breed, T. G. Catlin, and L. D. Harlow, U.S.V., have tendered their resignations.

Assistant Surgeon A. F. St. Sure Lindsfelt, 8th Battery Wisconsin Vols., and mustered into 12th Wisconsin Vols., Sept. 30, 1862, has been mustered out of service from date of muster in, he having been irregularly commissioned and mustered, there being no place provided by law for him.

Assistant Surgeon Simon Rosenberger of the 112th Pennsylvania Vols. has been, upon the recommendation of the Surgeon-General, discharged the service of the United States on account of incompetency.

By direction of the President Surgeon D. Cooper Ayres, 7th Wisconsin Vols., who was discharged the service by Special Orders 87, current series, is hereby restored to his command, provided the vacancy be not filled.

SPECIAL ORDERS, No. 148.

War Department, Adj. Gen'l's Office,
Washington, March 31, 1863.

18. The following assignment is made of medical officers:

Assistant Surgeon Richard J. Lewis, U.S.V., to report to the Medical Director at New Orleans, La.

Assistant Surgeon Franklin Grube, U.S.V., to report to the Medical Director of the Army of the Potomac.

Assistant Surgeon John Trenor, U.S.V., to report to the Medical Director, Department of the South, Hilton Head, S. C.

Surgeon Sanford B. Hunt, U.S.V., to the Medical Director in this city.

Assistant Surgeon James S. Boisnot, U.S.V., to report to the Medical Director, Department of North Carolina, at Newbern, N. C.

Surgon William H. Gohrecht, U.S.V., and Assistant Surgeons J. W. Lawton and A. M. Wilder, U.S.V., to report in person at the Headquarters, Department of the Ohio, and by letter to the Assistant Surgeon-General at St. Louis, Mo.

Assistant Surgeon Samuel Hart, U.S.V., to report in person at the Headquarters, Department of the Cumberland, and by letter to the Assistant Surgeon-General at St. Louis, Mo.

Assistant Surgeon Lewis C. Rice, U.S.V., to report in person at the Headquarters, Department of the Tennessee, and by letter to the Assistant Surgeon-General at St. Louis.

Assistant Surgeon David G. Rush, U.S.V., to report in person to the Assistant Surgeon-General at St. Louis.

Assistant Surgeons William Frothingham and E. B. Dalton, U.S.V., to report to Surgeon R. H. Gilbert, U.S.V., Medical Director, Fort Monroe, Va.

Assistant Surgeon B. J. Vanderkieft, U.S.V., to report to Surgeon J. Simpson, U.S.A., Medical Director at Baltimore, Md.

Assistant Surgeon R. S. Kenderdine, U.S.V., to report in person to Surgeon W. S. King, U.S.A., Medical Director, Philadelphia, Pa., and by letter to Surgeon J. Simpson, U.S.A., Medical Director at Baltimore, Md.

By order of the Secretary of War,
(signed) E. D. Townsend,
Asst. Adjutant-General.

SPECIAL ORDERS, No. 168.

War Department, Adj. Gen'l's Office,
Washington, April 9, 1863.

4. So much of Special Orders 37, from this Office, as discharged Surgeon J. Owen, U.S.V., for incompetency, is hereby revoked, and he is reinstated in his original position without loss of pay or allowances.

5. A Board of Medical Officers to consist of Medical Inspector R. H. Coolidge, U.S.A., Surgeon Meredith Clymer. U.S.V., and Assistant Surgeon Roberts Bartholow, U.S.A., will convene in this city on the 10th inst. to prescribe rules for governing "Boards of Enrolment," in determining who shall be exempt from draft, as physically and mentally unfit for the service.

7. The resignation of Assistant Surgeon R. O. Craig, U.S.A., has been accepted by the President, to take effect April 7, 1863.

8. The resignation of Surgeon D. H. Agnew, U.S.V., has been accepted by the President, to take effect April 6, 1863.

9. The resignation of Medical Storekeeper Victor Zoeller, U.S.A., has been accepted by the President, to take effect April 6, 1863.

15. The following assignment is made of Medical Officers:

Medical Inspector W. S. Townsend, U.S.A., to report to Medical Inspector Peter Pineo, U.S.A., at New Orleans, La.

Assistant Surgeons William Grinstead and A C. Schwartzwelder, U.S.V., to report for duty in person to Surgeon L. H. Holden, U.S.A., Medical Director, Department of the Ohio, and by letter to Assistant Surgeon-General R. C. Wood at St. Louis, Mo.

Assistant Surgeons J. Q. Adams and O. K. Reynolds, U.S.V., to report for duty to Surgeon O. M. Bryan, Medical Director, Department of New Mexico, Santa Fé, N. M.

By order of the Secretary of War,
(signed) E. D. Townsend,
Asst. Adjutant-General.

Assistant Surgeons Adolph Majer and J. M. Robinson have been promoted Surgeons of Volunteers.

Surgeon Socrates N. Sherman, New York Vols., has been appointed Surgeon U.S.Volunteers.

Drs. William Grinstead, O. K. Reynolds, A. C. Schwartzwelder, and J. Q. Adams, have been appointed Assistant Surgeons of Volunteers.

Medical Inspector John E. Summers, U.S.A., and Surgeon J. D. Brnmley, U.S.V., have been ordered to report to Assistant Surgeon-General R. C. Wood, at St Louis.

The appointment of Paul Martin, as Assistant Surgeon 5th Maine Vols., has been revoked, there being no evidence of service rendered, he having never joined his regiment.

A Medical Board to consist of Surgeon Henry Janes, 3d Vermont Vols., E. B. Dalton, 36th Vermont Vols., and Surgeon S. W. Oakley, 2d New Jersey Vols., have been ordered to convene at the Headquarters of the 1st Army Corps, Army of the Potomac, on the 11th inst., for the examination of such Medical Officers as may be ordered before by the Medical Director.

Assistant Surgeons Elbert Rowland, 127th New York Vols., and Jonathan Cass, 40th Massachusetts Vols., have been ordered to report to Surgeon R. O. Abbott, Medical Director, Washington, D.C.

Original Lectures.

REMARKS ON THE MUMMIED HEADS

TAKEN FROM THE JIVARO INDIANS OF ECUADOR,

WITH AN ACCOUNT OF THE VARIOUS MODES OF EMBALMMENT,

BEING AN ABSTRACT OF A PAPER READ BEFORE THE AMERICAN ETHNOLOGICAL SOCIETY.

By J. KING MERRITT, A.M., MD.,

OF NEW YORK.

PART II.

The question now arises—That if these mummifications are adult human heads reduced to pigmy size, what was the process adopted by which this was accomplished? We know from the writings of Herodotus and Diodorus Siculus that the processes of embalming practised by the Egyptians were elaborate and complicated; also that all the mummies ever found or alluded to were of the entire person, excepting the internal organs, and that the external soft parts were invariably impregnated with foreign substances as preservatives. It is thought, however, that the real method of embalmment is not easily comprehended by us moderns, for some doubt the possibility of removing the brain through the nostrils, and others have supposed that the intestines were not removed at all. But it is a general conclusion that there were two principal processes adopted by the Egyptians, by which in one case the whole members, features, and expression were preserved entire, and in the other and more general operation, the flesh was consumed, and nothing except the skin and bone were retained. Examples of the former are not now extant, but there are two kinds of mummies still obtained in Egypt. Those in a dry, indurated state, completely impregnated with resinous matter, which, from its hardness, may be broken in pieces; and those which, with their envelopes, are soft and yielding upon external pressure, and prepared with very little resinous matter, and with nothing but vegetable mould in the cavities. Although the flesh unquestionably was in certain cases preserved, it seems probable that the body was more usually reduced to a skeleton and boiled in the resinous and antiseptic mixture which was invariably used. The Gaunches of the Canary Islands practised embalmment quite extensively. Their history is involved in great obscurity, and their existence is best proved by the remains of the dead, for their posterity has been for many years almost, if not entirely, extinct. "Their mode is supposed to be, for it is not explicitly known, as follows. Apparently the brain and intestines were removed entirely, then the body was washed in an infusion of pine-bark; next, it was anointed with butter, or warm grease, impregnated by boiling with such odoriferous herbs as grew in the country, and afterwards the body was exposed to the sun. When the body became well dried the same operation of anointing was repeated. These alternate operations of anointing and drying in the sun were practised until the body was thoroughly impregnated with the aromatic onguent, and was reduced to a very light weight. Then the body was wrapped in an envelope of three layers, which were composed of bandages of tanned buck or goat-skin, three inches broad. The bodies thus embalmed have been found in the caves in the mountains, occupying niches in the rocks. One that was recently examined presented the features of the face quite perceptibly, the skin of the whole body well preserved, dry, but pliant, and of a deep brown color. *The hair was very long and black, but easily detached from the scalp.* Thirty-two teeth were found in the jaws, and so firmly fixed as to require a dental instrument to remove them. The back and belly were covered with hair; the skull was empty, but the cavities of the thorax and abdomen were full of a grain resembling rice." "At Nukahiwa, one of the Marquesas Islands, it is said that embalmment is practised at the present day. The process is as follows:—The body is washed and laid on a platform, and then constantly rubbed for nine months with cocoa-nut oil to repel the putrefaction. From this continued application of the oil and accompanying friction the body becomes hard as stone, and quite incorruptible. At the expiration of a year the friends of the deceased partake of a feast, during which they thank their gods that he has been permitted to arrive at the other world. After the feast the body is broken up into small pieces and packed in a box, and carried to the burying-ground, which is styled 'Morai.'" Capt. Cook, in his Voyages, states that the Otaheitans preserve the bodies of their chiefs a long time for public exposure. They accomplish this by taking out of the abdomen the intestines, and then stuff the cavity with cloth. After this they lubricate the body freely with cocoa-nut oil. At Palermo the bodies of those of high rank have been preserved in catacombs near the city for centuries by the simple process of desiccation. The body is dried in a stove heated by a composition of lime. The flesh of these mummies is dried hard, and shrunken on the bones, but the contraction and distortion of the features exhibit hideous pictures of mortality. The old Spanish writers state that the ancient Peruvians preserved the bodies of their dead by a simple process, very unlike the elaborate embalming of the Egyptians. According to these writers, the Peruvian method consisted *in exposing the body to the action of the cold, exceedingly dry, and highly rarified atmosphere of the mountains.* Such, indeed, seems to be the opinion of Garcilasso de la Vega, though some writers speak of resinous and other substances having been used for embalming the body, as, for instance, Acosta declares, "that one of the sovereigns of Peru was so well preserved by a kind of rosin, that his body seemed alive." The appearance, however, of one of the royal mummies found at Cuzco, as reported both by Ondegardo and Garcilasso de la Vega, makes it probable that no foreign substance was employed for their preservation. Prescott, in speaking of the embalmed bodies of the Incas in the Great Temple of the Sun at Cuzco, says, that "they sat with their heads inclined downwards, their hands placidly crossed over their bosoms, and their countenances exhibiting their natural dusky hue, which was less liable to change than the florid complexion of the European. Their hair was raven black, or silvered over with age, according to the period of life at which they died. It seemed like a company of solemn worshippers fixed in devotion, so true were the forms and lineaments of life. The Peruvians cherished and venerated these relics of their Incas, and as they were carried through the streets, decently shrouded with a mantle, the Indians threw themselves on their knees in sign of reverence, with many tears and groans. Also on certain festivals the revered bodies of their sovereigns were brought out with great ceremony into the public square of the Capitol. Invitations were sent by the captains of the guard of the respective Incas to the different nobles and officers of the Court, and entertainments were provided in the names of their masters, which displayed all the profuse magnificence of their treasures. The banquet was served by menials of the respective households, and the guests partook of the melancholy cheer in the presence of the royal phantom, with the same attention to the forms of courtly etiquette, as if the living monarch had presided." The Peruvians secreted these mummies of their sovereigns after the conquest, that they might not be profaned by the insults of the Spaniard. Garcilasso de la Vega saw, in 1560, the five mummies discovered by Ondegardo in Cuzco, and thus speaks of them: "They were dressed in their regal robes, with no insignia but the 'Llautu' on their heads. They were in a sitting posture, and perfect as life, without so much as a hair or an eyebrow wanting." Now, in all of these accounts of the different processes of embalming, and of the conditions and appearances presented by the various mummics of both hemispheres, do we find anything analogous to these diminutive Macas heads? None of the processes described suggest the idea of great shrinkage, except that of simple desiccation. In the case of the mummies at Palermo the soft parts are greatly shrunken, but they are equally distorted. How much of this distortion is owing to the presence of the unyielding osseous frame, and the application of artificial heat, which produced rapid desiccation, and how much more the shrinkage might have been if the bones were entirely removed, I am not prepared to say; still, it is my opinion that these circumstances were the causes of the distortion to a great extent, and that the shrinkage would be greatly increased by the removal of the bony attachments. Now, if the Peruvian method of *slow* desiccation is duly considered *with the perfect results alluded to*, we may reasonably presume, that if the bones of the body should be removed, a regular and uniform shrinkage might occur without much distortion; still, there is a limit to this, and beyond this limit of shrinkage, if urged by any process, I am disposed to think distortion would occur. Therefore, I conclude, that if the very slow process of desiccation be adopted by the exposure to the well known atmospheric conditions existing on the altitudes of Peru and Ecuador (one of the influences of which is to repel *naturally* the putrefactive tendency in dead animal tissues), contraction of the soft parts would be produced regularly and smoothly, if not interfered with from unyielding osseous attachments, and as this is limited, consequently I am forced to think that the Macas heads originally were exceedingly small, and have been preserved and reduced to their present size by the *simple process of slow desiccation, there being no evidence of impregnation of the tissues with resinous or any other foreign substance.* In reference to the fact that their configuration has been maintained so perfectly, I think this can be explained in this way: the manipulator has, by the simple process of stuffing the cavities after the removal of the bones with some pliable and elastic material, prevented the soft walls of the head and face from collapsing—a result not difficult, if we admit that the tendency to distortion is comparatively slight under the process of *very slow desiccation.* And after the tissues have become somewhat stiffened by the desiccatory process, then by persistent manipulation the outlines have been fashioned after the prevailing taste, which was, as we are told, to exaggerate the natural peculiarities obtaining to the cranial developments of the race. The next question for consideration is—Why were *the heads only* thus preserved, and to whom did they belong? We will recollect that in the accounts given of mummies there is no allusion made to the preservation of the heads either alone or separate from the body. There is an approximation to the idea in the custom said to be practised by the Indians at Fort Mulgrave on the North West Coast, and some other neighboring tribes. They decapitate their dead chiefs, and place the heads in a box by themselves. This singular custom also prevails in some of the South Sea Isles, as the Ladrone, and Society, and Gambier groups. But none of these Indians appear to practise the art of preserving the bodies or heads of their dead as mummies. It therefore appears to me that these Macas heads are the mummified trophies of war; that they are the heads of warriors slain in battle, and were preserved by the victorious combatant, as the North American Indian does the scalp of his fallen enemy. There are several reasons for this conclusion, which I will enumerate. First, the unnatural and unprecedented character of the custom, which would decapitate and mutilate the body of a cherished friend, or highly respected person, for the sole purpose of preserving a portion of it to be worn about the person. Second, the fact of the existence of the perforations through the vertex of the scalp from which the heads were suspended, and evidently made for the purpose of *facilitating the habit of wearing* these heads attached to a loop around the neck of the victor, as demonstrated by *the hair being worn away by friction* around the edges of these perforations. Third, the irregular openings through the cranial walls, which are located in the right temples of both heads, are most probably battle wounds, for they differ in character from the other linear openings through the facial walls which have been made apparently for the purpose of extracting the inner parts, and afterwards closed by sutures. Likewise the conditions of the edges, and the tissues in the vicinity of these irregular openings, are indicative of such a supposition, as previously explained. Lastly, the color of the hair having been changed to the rufous hue, which is known to occur rather from the exposure to the weather than from the longest period of inhumation.

In reference to the resemblance of the curious appendages from the mummied heads to the Quippus of the Ancient Peruvians, as described by numerous authors, it seems to me that they are imperfect attempts to imitate the originals. The Quippus are said to have been composed of twisted wood, and consisted of large cords, which were the bases of the documents; to these base-cords were fastened threads, more or less fine, which were attached in a peculiar manner, and were knotted or intertwined in an established order to express ideas, events, or numbers. The size of the Quippus varies; sometimes the base-cord is five or six yards long, at others it is not more than a foot; the pendent strings or branches rarely exceed a yard in length, but are generally shorter. The different colors of the threads have different meanings also; thus, red signifies war or a soldier; yellow, gold; white, peace; green, wheat or maize, etc. In the arithmetical system a single knot means 10; a knot doubly intertwined, 100; triply, 1000. Not only are the color and knots to be considered, but even the mode of twisting the threads, and particularly the distance of the knots from the base-cord, are important to a proper understanding of the Quippu. In every city of any note there was an officer, styled Quippu-Camayoc, whose business it was at all times to knot and decipher these documents, and in course of time this became so perfect a science that those skilled in it attained to the art of expressing by knots historical events, laws, and decrees. But notwithstanding their skill, whenever a Quippu came from a distant province it was necessary that it should be accompanied by a verbal commentary sufficient to indicate at least the subject matter of which it treated; and the Quippus which related to the same subject were always preserved together in certain repositories, that there might be no risk of error by mixing or changing them. Repeated attempts made in modern times to read the Quippus have proved failures, because of the difficulty of deciphering them without a verbal commentary to explain the subject matter of these documents. And this especially applies to those found in the "Huacas." Besides, the art or science of the Quippu language appears to have been lost to a great extent by the modern Peruvian, although it is thought that there are still in the Southern Provinces of Peru, Indians who know how to decipher these intricate memorials, but they guard their knowledge as a sacred secret inherited from their ancestors. Now, in conclusion, I am disposed to think that the configuration of the lips, and the perforations through them, which no doubt date from the earliest history of the mummification, are indicative of having been produced by the attachment of a Quippu, which perhaps chronicled the history of the trophy; and that the degenerate descendant of later times has, in order to perpetuate the original tradition expressed by the lost Quippu, attempted to supply its place in the imperfect mode which his diminished intelligence dictated.

34 W. 40th st., New York City.

M. A. Dumont, a young French physician, has sought and obtained permission to go to Mexico to study the yellow fever, which is decimating the French soldiers there. The Government minister has requested the Academy of Medicine to give their young *confrère* some useful instructions as to how he may best employ his talents in the study. —*Brit. Med. Jour.*

Original Communications.

RESULT OF SOME EXPERIMENTS PERFORMED UPON THE LIVER

OF A MAN WHO DIED IN THE ALBANY HOSPITAL, SIX HOURS AFTER HAVING BEEN INJURED ON THE HUDSON RIVER RAILROAD.

By HOWARD TOWNSEND, M.D.,
PROFESSOR OF PHYSIOLOGY, ALBANY MEDICAL COLLEGE.

The patient was a stalwart, healthy German, about forty-five years old. By the accident, which occurred about noon, his pelvis was fractured in several places. When brought into the hospital he was in a state of collapse; pale, almost blue; cold; no pulse at the wrist. Though extremely prostrated, his mind was clear, answering all questions properly. Some brandy and water was given to him, which he swallowed, but soon ejected. He never rallied from the shock of the accident, dying between six and seven in the evening of March 30th.

The autopsy was performed at nine o'clock the following morning in the amphitheatre of the hospital by Professor Armsby, the students from the college being present.

The thoracic viscera were healthy, excepting a small tubercular deposit at the apex of the right lung. The abdominal viscera were also healty. The pelvis was fractured at the pubes, its rami moving as though there were no connecting ligament. Excepting the fractures of the pelvis, and some effusion of blood into its cavity and between the glutei muscles, everything was normal.

Having already demonstrated to the class at the college the glycogenic function of the liver by means of a sheep's liver, which he had upon the operating table some four hours after the animal was killed, proving the sugar in it by means of the cupro-potassique test of Bernard, I was anxious to show the sugar in the human liver, which is a rare circumstance from several reasons. Among them the difficulty of obtaining a healthy human liver, only to be obtained after executions or death by accident, and the liver in disease will exhibit no sugar.

We were *not* successful in obtaining *sugar*. Still the result of the experiment may even in a negative manner prove instructive, and perhaps interesting.

One-fourth of the liver was taken, washed, to remove all the blood possible, and then chopped into a pultaceous mass, which with a little water was boiled in a porcelain vessel for half an hour, to coagulate the albumen and concentrate the liver juice. The mass was then thrown upon a filter, the fluid which filtered through was again filtered through animal charcoal, when a clear opaline fluid was obtained—pure liver juice, a portion of which juice was boiled in a test-tube over a Bunsen's lamp, with the *cupro-potassique test*, prepared according to Kletzinsky's formula. Which is as follows:

4 parts solid caustic potash,
3 " glycerine,
2 " saturated sulphate of copper.

No change of color, and no deposit took place, which would have occurred had there been glucose of the liver juice; then instead of retaining the rich blue color of the test, it would have changed to a reddish fawn color with a deposit of protoxide of copper, because of the powerful affinity of glucose for oxygen, deoxydating the deutoxide of copper, and throwing it down as a protoxide. Thinking that perhaps the glycogene might be there, not yet changed to glucose (which change will occur by contact with any of the animal ferments), we mingled the liver juice with some saliva, and then subjected it to the cupro-potassique test, but with the same result, the fluid remaining deeply blue. This cupro-potassique test is so delicate that we did not think it necessary to resort to Trommer's or any of the more common tests.

This same test had been entirely successful with us in the experiments upon the sheep's liver, at which experiment we also proved the absence of sugar in the lungs of the same animal, the test remaining blue with the lung juice, whilst it changed to a reddish fawn color depositing protoxide of copper with the liver juice.

The glycogenic matter of the liver in its ultimate composition is, according to Mr. Pelouze, as follows:—$C_{12}H_{12}O_{12}$, while cane sugar is $C_{24}H_{22}O_{22}$, grape sugar, or glucose is $C_{24}H_{24}O_{24}+2\ H_2O_2$. Though the result of this experiment was not such as we had desired, still it is not discouraging, for perhaps it can all be explained by the following remarks which I have extracted from Bernard's Leçons de Physiologie Semestre d'Hiver 1854–55.

"During severe maladies, particularly acute ones, the nutritive functions are seriously impaired, the function of the liver ceases, producing no more sugar.

"By cutting the pneumo-gastric nerves we have arrested the production of sugar in the liver of a animal from which we had obtained the sugar previous to the experiment.

(Might not the shock with our patient have had a similar effect in arresting the sugar development in his liver?)

"As to the presence of sugar in the liver of man, it is evident *that in the greatest number of cases where it has been sought after, it was impossible to detect it.*" (Page 182.)

And in the summary of his experiments Mr. Bernard makes the following statements:—

"The glycogenic function undergoes oscillation like all of the secretions, particularly those connected with the organs of digestion.

"It is more active at the moment of digestion.

"It diminishes in the intervals.

"It can disappear at the end of prolonged fast.

"External influences have their effect upon the secretion of sugar. Cold causes it to disappear, if the cold be intense. The action of the nervous system influences the function materially, either to increase it, to diminish it, or check it."

Now, certainly two of these circumstances were exercising their influence upon our patient—the shock of his nervous system, and a prolonged fast—his stomach was empty, having eaten nothing since his breakfast, and the autopsy proved it.

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REMARKS ON THE TREATMENT OF HARE-LIP,

By DAVID P. SMITH, Surg. Vols.,
SURGEON IN CHARGE OF FAIRFAX SEMINARY HOSPITAL.

There is perhaps no operation in which accuracy of adjustment is more required than in the operation for hare-lip. Upon the mechanical nicety of the paring of the edges, and the introduction of the pins or sutures, depends the personal appearance of the patient for life. In the case of a fine talented young man, upon whom I recently operated for cleft palate, the hare-lip accompanying the last named deformity was made, by the mal-adroitness of the surgeons, to require three operations in early life before decent adjustment was effected. I saw a year or two ago a young gentleman of first rank in New York, who consulted me on account of the great deformity which remained after a similar operation which had been performed in early infancy. A child aged five years was recently brought to me with great deformity remaining after the operation for hare-lip. When we consider the very bad effect that the consciousness of deformity has upon the mind of a sensitive child, it may perhaps be thought worth our while to adopt some method that will *insure* good results. Such I believe to be the one which I will endeavor to explain in as brief a manner as possible.

I conceive that

1st. The hæmorrhage should be reduced to a minimum.

2d. The paring of the margins should be done in a manner that will prevent any notch in the free margin, and will also enable the incision to be exact in spite of the strugglings of the infant.

3d. Insertion of the needles or sutures should be rendered mathematically exact.

4th. The time occupied should be reduced to a minimum.

The experience of the profession has furnished principles that will be sufficient to enable us to carry out the above indications, if we will but seek. Take two of the forceps invented a few years ago by Dr. Alden March of Albany; provide them with catches like artery forceps, and have transverse lines marked upon them at distances of a quarter of an inch, so that a means may be furnished of exactly and rapidly determining the situation of the sutures. I modify the *method* of operating by applying these two exactly similar forceps, one to each side of the cleft, fastening them there by the catch, introducing the sutures about half an inch from the margin of the forceps, exactly opposite the transverse lines, and finally cutting away the margins of the cleft inclosed in the forceps. Nothing now remains to be done but to close the cleft, which, on account of the mechanically exact introduction of the sutures, is effected instantaneously. Metallic sutures being used their prior introduction does not expose them to the danger of being cut. According to Lisfranc's method I would not at the labial margin entirely sever the portion pared from the margin of the cleft, but would suffer it to remain on each side, until the cleft being accurately adjusted these *parings* may be shortened to suit, a suture being passed through them, forming a decided V-shaped projection downwards. I deem this precaution necessary in addition to curving the lines of incision after the manner of Celsus, because I never yet saw any one years after the operation in whom an unseemly notch did not exist.

I forward to you these few remarks concerning this common operation, written two or three years ago, because recently a soldier was admitted into this hospital with an untouched hare-lip, and the operation I did for his comfort brought the subject vividly before my mind.

David P. Smith, Surg. U.S.V.

DO COMPOUND FRACTURES OF THE SHAFT OF THE FEMUR, MADE BY CONICAL LEADEN BULLETS ALWAYS DEMAND AMPUTATION?

By JOHN T. HODGEN, Surg. Vols.,

IN CHARGE OF CITY GENERAL HOSPITAL, ST. LOUIS, MO.

I am induced to give some of my experience in gunshot fractures of the os femoris by reading an article from the pen of David P. Smith, Surg. U.S.V., found in the American Medical Times of March 7, 1863, in which he urges the importance of amputation in the following language:—"From dissections of such injuries after they were removed by amputation, I was, however, enabled very early to recognise the hopeless nature of such cases if left to themselves." Dr. Smith and myself have seen such cases under widely different circumstances—he on the battle-field, and I in the hospital, after they had been removed thither hundreds of miles—and we have (naturally, perhaps) come to widely different conclusions. At this hospital we have received wounded from Springfield, Mo., Lexington, Mo., Fort Donelson, Tenn., Pittsburgh Landing, Tenn., (Shiloh), Corinth, Miss., Iuka, Miss., Pea Ridge, Ark., Prairie Grove, Ark., Vicksburg, Miss., Arkansas Post, Ark., and other places, in all sixty-five cases of gunshot fractures of the femur, and not one amputation has been performed for such injuries. In several instances I have removed spicula of bone six inches long, this sufficiently attesting the extent of shattering.

Every experienced surgeon knows that amputations after severe injuries from railroad accidents are far more fatal than when a conservative course of practice is pursued. So well is this established, that amputations under such circumstances are rare. Why should not this rule of practice be observed in compound fractures of the femur from gunshot wounds? A knowledge of this fact in connexion with the time required to transport patients (being from six to fifteen days) to this hospital, determined me to pursue a conservative course. The time for successful amputation having passed, it was thought better to allow the patients a chance of recovery without amputation, rather than to further imperil life by this operation. Since the 20th day of September, 1861, there have been received at this hospital sixty-five cases of gunshot fractures of the shaft of the os femoris. Of these eighteen have died, four remain under treatment (two of whom are walking with canes, the other two in a fair way to recover), and forty-three have recovered and left the hospital with good limbs, except one, and that one has a limb far better than "Palmer's Best" substitute.

It will be observed that the percentage of mortality is less than twenty-eight, thus giving better results so far as life is concerned than amputation of the thigh would do, besides preserving useful limbs.

These injuries were not all inflicted by conical leaden bullets, a part being by grape, canister, and the round leaden bullet. The number by each I do not know, as the balls often passed through and were lost, so that their character cannot be known.

From my observation I would say gunshot fractures of the shaft of the femur made by conical leaden bullets *do not* demand amputation, except when associated with injury of the nerve or artery. True this conservative course robs the battle-field and the hospitals of much of their attractive power for the surgeon, and under its rule the brilliant operation of dividing a human being in his middle by amputation at the hip-joint in ten seconds would be less frequently performed.

The above statistics are startling to surgeons who have seen the terrible work done by the conical leaden bullet, and they will naturally cultivate a feeling of incredulity, but to my mind these recoveries are not so incredible as that sixty-five men thus wounded should have escaped mutilation at the hands of those humane, patriotic, and time-sacrificing surgeons, who, "by order" or without it, flock to the battle-fields (some days after the fight), who swarm on transports, and who rush to hospitals to gratify (without charge) a morbid thirst for capital surgical operations.

Reports of Societies.

UNITED STATES ARMY MEDICAL AND SURGICAL SOCIETY, OF BALTIMORE.

Stated Meeting, Feb. 19, 1863.

SURGEON C. C. COX, U.S.V., PRESIDENT, IN THE CHAIR.

[Reported by Dr. Geo. H. Dare, Acting Asst. Surg., U.S.A., Secretary.]

(*Concluded from page* 199.)

CONSERVATIVE TREATMENT IN GUNSHOT FRACTURES.

Dr. Geo. H. Dare spoke briefly from recollection of three cases of gunshot fracture of the humerus, illustrative of the success attending conservative treatment in gunshot injuries at that bone.

For the more detailed reports which follow, he is indebted to Dr. Waters, who furnished him with notes.

I.—Henry H. Wareham, Private, Co. A, 11th Regt. Penn. R. C., aged 20 years, was wounded through the middle of the arm, at the battle of White Oak Swamp, June 30th, 1862. He walked a mile to a field hospital, where his wound was bandaged. July 13th he was captured by the Confederates, and sent to Richmond, where he endured the usual hardships at the Libby prison until he was paroled and sent to Baltimore. Was admitted into the United States Army Hospital, Camden st., Baltimore, July 25th. A musket ball had passed horizontally through the right arm from behind forwards, fracturing the humerus in its middle third. Lateral splints were applied for the first time, and cold water dressings. Aug. 2d.—Union not having taken place the fractured extremities were resected, about two inches of the bone being removed. The elbow was afterwards well supported, but it was found impossible to keep the ends of the bone in immediate apposition, the finger for a long time could be passed between them. Notwithstanding this difficulty, within two months union at first of a cartilaginous or lymphatic nature had taken place, and in this osseous matter was gradually deposited. A fistulous orifice continued in front, and some dead bone being detected with the probe, the orifice was expanded January 22d, and several small sequestra, entirely detached, were removed. Osseous union was ascertained to be perfect. Feb. 6th.—There is still a trifling discharge from the anterior opening. The man can take off his cap without difficulty. Some stiffness of the muscles exists, which is rapidly passing away. There is every probability of his regaining almost perfect use of the limb.

II.—John Hilberg, Corp., Co. F, 5th Md. Vol., aged 23 years, a native of Germany, by occupation a dresser in a cotton factory, of bilious temperament, was wounded at the battle of Antietam, Sept. 17th, 1862, while facing the enemy and in the act of firing his gun. He proceeded immediately to a neighboring hospital. He remained there two days, and on the nineteenth walked from Kiddlysville to Frederick city, a distance of twenty-three miles, being twenty-six hours on the journey, remaining there all day and continuing his journey to Baltimore in the cars. Was admitted into the hospital Sept. 21st. A minié ball entered an inch and a half above the anterior fold of the axilla, and one inch from the margin of the glenoid cavity, passed downwards, backwards, and outwards, fracturing the bone at its neck, and extensively comminuting the shaft, and lodged under the integuments on the outer aspect of the arm, six inches below the joint. It was extracted from this situation the day of his admission. Sept. 3d. The arm was immensely swollen near the point of injury, the tissues livid, and the pus accumulated in quantity. A free incision six inches in extent was carried quite through the integuments down to the muscles, which speedily relieved the strangulation, and contributed much to the comfort of the patient. A light poultice of bread and yeast was applied for a few days, when the engorgement being reduced, and the healthy action of the vessels restored, water dressings were applied for two weeks, the arm in the meantime being sustained simply by a bandage. At the expiration of this time lateral splints were applied, and the forearm sustained in a sling. In two months union had become firm, and the discharge, at no time profuse, subsequent to the first few days after his admission was greatly diminished. Feb. 6th, 1863.—The discharge has ceased. Union is firm, without superabundance of callus. The contour of the arm is natural, and the tissues healthy in appearance. Although the patient has not yet recovered the perfect use of the limb, especially in its complete elevation above the level of the shoulder, the entire facility with which he executed many movements of it renders it quite certain that only a short time will elapse before he will use it as ever he did.

III.—Lewis Schrœder, Corp., Co. E, 1st U.S. Artillery, thirty years old, a native of Germany, tailor, of nervo-sanguine temperament, was wounded in the seven days' fight, June 30th, 1862, while in a stooping position elevating his gun. He was supported to a farmhouse in the rear. He experienced no pain at the moment of being wounded, and was not aware of the fact until he observed the blood dripping from his hand. The ball was extracted the same day. An apparatus was employed, but the arm above the wound was bandaged, and the wound kept wet with cold water. He remained in the hospital eight or ten days, and was then taken to Richmond in a farmer's wagon, fourteen miles over a bad road, suffering much on the journey. He remained in Richmond fifteen days, with no change of dressing and no surgical attendance. At the expiration of that time he was forwarded to Baltimore. He was admitted into the National Hospital July 25th, his general condition at this time being good. A minié ball entered the front of his right shoulder midway between the joint and the angle of the axilla, passed downwards, outwards, and backwards, comminuting the bone at its neck, and lodged under the integument posteriorly three inches below the point of entrance. It was removed by the regimental surgeon the same day. Several fragments were removed with the dressing-forceps after his admission into this hospital. Aug. 24th.—Union not having taken place from the freeness of the discharge, it being apprehended that such would not occur, he was taken into the operating-room to have the head of the humerus with the upper extremity of the shaft exsected, but becoming alarmed by the loud outcries of a patient who had just undergone an operation and was recovering from the influence of chloroform, he refused obstinately to have the operation performed, although advised to it by a number of surgeons present, all of whom agreed, after careful and thorough manipulation of the injured limb, that the bone was fractured into the joint. As he appeared quite comfortable, subsequently nothing further was attempted, although on several occasions he signified his willingness to undergo the operation. Owing to circumstances the operation was postponed from time to time, until four weeks subsequent to his visit to the operating-room, the attending surgeon on examining the arm found that union had unmistakably taken place. The patient had suffered an attack of erysipelas prior to August 24th, and had been sent in consequence to the ward appropriated to the treatment of that disease. Oct. 30th.—Union is perfect, with some superabundance of callus. The discharge from both orifices still continues in moderate amount.

The movements in the shoulder-joint are but little impeded, the patient permitting the arm to be moved freely in almost any direction, and to be raised without much difficulty to a horizontal position. The indications are favorable to the recovery of every natural movement of the limb.

The Society then adjourned.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, Nov. 26, 1862.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

(*Concluded from page 188.*)

WAXY LIVER.

Dr. Clark first exhibited a specimen of waxy liver. The subject of the fine specimen, a woman, was admitted into Bellevue Hospital on a certain evening last week, and without being considered in a sufficiently dangerous condition to warrant any thorough examination, died early the following morning. Her previous history under the circumstances unfortunately was not obtained. On post-mortem examination, a tolerably well marked waxy liver was found. The tissue of the organ, examined under the microscope, showed the existence of the characteristic cells, which appear, however, more like solid bodies. There is no nucleus in these so-called cells, but a few have in their centre a shining point, evidently composed of fatty matter. Dr. Clark remarked that, notwithstanding it had been said that these cells were transformations of the healthy tissue of the organ, he believed that the opposite was the case. An attempt had been made by Dr. Clark on the evening previous to ascertain if the structure would answer to the reaction of the amyloid matter, but no results were obtained, and it was supposed that the tests employed were not sufficiently delicate. The liver did not seem to have undergone the degeneration equally in all its parts. The weight of the organ was about six pounds. In concluding the history of this specimen Dr. Clark stated that it had been asserted that the waxy degeneration of the liver occurred in persons who were of scrofulous constitutions, and who having had syphilis had been treated with mercury until the symptoms of mercurial poisoning predominated. He had met with three or four instances in which that condition of the system was associated with the lesion in question. The liver not being much enlarged, there was only a moderate amount of effusion found in the abdominal cavity.

CAMP DIARRHŒA.

Dr. Clark next exhibited portions of intestines removed from soldiers who had died in Bellevue Hospital from the chronic diarrhœa contracted in Virginia. He only wished to show the specimens in a recent state, and to make a few general statements in reference to the character of the disease as observed in ten post-mortem examinations. The detailed account of the different cases he preferred to reserve for another occasion. When the first cases of this diarrhœa had presented themselves, he expected to find the same lesions after death which had characterized the chronic diarrhœa contracted by our soldiers during the Mexican war, viz. ulcerations of the mucous membrane. He was, however, very much surprised to find that such was not the case. The mucous membrane, in the majority of instances, presented an abraded appearance, as if an acid matter had been applied with a brush, only removing the epithelial scales. All the intestines examined gave an irregular and extraordinarily red injection, and in several instances there had been observed spots of ecchymosis in the colon. In one specimen there were noticed slight ulcerations in the mucous membrane of the large intestine, mostly in its upper portion, each spot being surrounded by a layer of lymph. The mesenteric glands were very much enlarged in every case examined, the kidney also had undergone some change, the majority being that form of Bright's disease associated with fatty deposit.

INSIDIOUS PERI-ENCEPHALITIS—MANIA—EPILEPSY—DEATH DURING CONVULSIONS.

Dr. G. T. Elliot presented the medulla oblongata and a portion of the cerebellum removed the evening before from the body of a gentleman, a friend of his, thirty-five years of age. The history of the case was substantially this:—The patient was a strong, robust, and healthy looking man, married, and the father of three children, and up to a few days before his death had generally enjoyed good health. He had, however, from his earliest childhood been afflicted with attacks of epilepsy, but this fact, however, was kept for a long time from the knowledge of his friends. About ten years ago, yielding to certain influences, he became a very free drinker, but, by a strong effort of the will, he was enabled to govern his impulses, not, however, before he had experienced some very decided symptoms of delirium tremens. The resolution to eschew drink was faithfully kept from that time until his death. Some years previously he suffered the loss of a large amount of property, and through the severe struggle which he then passed he exhibited no ordinary qualities of mind. Of late he had become the subject of great prosperity, and was making money very fast. The close application to business pursuits in one with such an excitable temperament as he was known to possess, caused great anxiety among his friends, lest he should be unable to sustain the severe mental exertion which he subjected himself to. On the Friday afternoon preceding the meeting, the patient called on Dr. Elliot in an alarming state of excitability, and after making some statements to him in reference to a large sum of money he had made that day, sought advice as to his physical condition. Dr. Elliot being very apprehensive of the condition of his friend, made a very careful examination; the pulse was 80 and perfectly normal as to the character of its beat, etc., and there was not a single symptom of disease of any part of the body; nothing wrong could be discovered about him save this extreme nervous excitability. This being the case, an anodyne of codeine was administered, with the hope that in the morning he would perhaps awake from the sleep calmed and refreshed. Up to one A.M., about a grain and a half of codeine had been taken, and sleep was procured. On Saturday morning the exaltation still continued, but this as on the day previous was the only symptom of disease present. He was enabled to sleep some during the day, and remained all the time quietly in bed. It having been discovered that the statements which he had lately been making in reference to his pecuniary successes were untrue, the suspicion of insanity was raised, and, at the suggestion of Dr. Elliot, Dr. Brown of Bloomingdale Asylum was sent for. Under the influence of codeine the patient passed the second night comfortably. His urinary secretion amounted to diuresis, but it was impossible to obtain any for examination. His bowels were perfectly free. On Sunday morning early Dr. Elliot was called on by the patient, who stated that he felt remarkably well, that he had had a very comfortable night's rest, and that he thought he was well again. During the conversation which followed the gentleman gave unmistakable evidences of insanity, and Dr. Elliot returned with him home, and watched with him until noon, when Dr. Brown arrived in town. It was the opinion of Dr. Brown that the patient's mania required restraint. The patient, believing he was watched, had then commenced to be threatening, but no time was lost in going through the necessary legal processes to get him into the Flushing Lunatic Asylum. The morning after he was confined in the asylum he slipped out of the window, and doubling upon his pursuers took refuge in the office of a lawyer friend, who held him until four o'clock in the afternoon. He was then returned to the asylum. The patient died the following night, or rather Monday morning, in a single convulsion. Death took place by apnœa, respiration ceasing before the heart ceased to beat.

The autopsy was made by Dr. Swift, in presence of Drs. Flint, Peters, Echeverria, and Elliot. There were no adhesions on either side of the chest. The lungs were well developed, moderately congested, and free from all tubercular deposit. The pericardium was natural. The heart was smaller than usual, and the seat of fatty degeneration. The append. epiploic. were also unusually full of fat. The cardiac valves were normal, and there was a small coagulum in the cavity of the right ventricle. The stomach was not opened. The bladder contained a small amount of urine, which unfortunately was not preserved for examination. The kidneys were normal in size, but markedly congested. The covering of the left kidney being peeled off, brought away with it portions of cortical substance.

Dr. Sands, at the request of Dr. Elliot, then gave the results of the microscopical examination of the heart and kidneys. The heart was found to be the seat of extensive fatty degeneration, more than half the fibres being the seat of the deposit. The cortical portion of the kidney was very largely granular, most of the granules being composed of fat. The tubuli uriniferi varied in size, but most of them were increased in their normal diameter. There were also present in considerable quantity mucous copical cysts. Besides this the unusual appearance was presented of the field studded with casts, identical with those observed in the urine of Bright's disease.

The brain was examined by Dr. Echeverria, who gave the following results:—Skull not thickened; the dura mater, somewhat congested, is free from adhesions to the bones and from any abnormal growth. On its removal the arachnoid appeared uniformly distended, although the cerebral fluid was not very much augmented. There were in the cavity of the membrane white patches, thicker over the anterior part of the cerebral lobes near the median fissure. The cerebral tissue and the arachnoid were intimately united by the capillary vessels, especially over the anterior part of the cerebral lobes, where it was impossible to detach the membranes without tearing away the brain.

Convolutions strongly marked, and rather softened, notwithstanding the time the body was kept in ice (twenty-four hours). By slicing the brain laterally the cortical substance was found of a deeper discoloration, and a general fructiform injection all over the centrum ovale. The surface of the cut always appeared moist, and nowhere exhibited any extravasation of blood. The white substance was evidently softened in the corpus callosum.

The posterior corner of the left ventricle contained a small quantity of bloody liquid, which filled nearly the right one; there was, however, in either of them, no coagulum, nor any other change than a congestion of the choroid plexuses. In the optic thalami, the corpora striata, and the cerebellum, the white and grey substances exhibited the appearance already noticed, but in the latter the discoloration of the cortical substance was deeper.

The congestion of the meninges is considerable over the oblong medulla, but there are no patches in the cavity of the arachnoid, firmly united to the organ by large capillary vessels.

A section on the median line of the medulla oblongata shows the grey matter highly congested, and of a reddish tint, without any effusion of blood.

Microscopical examination Nov. 26th, ten hours after post-mortem examination.

In the patches of the arachnoid the capillaries are dilated and varicose in several parts of their length, and surrounded with a granular amorphous matter. The coats of the vessels are likewise granular. There are very few fatty granulations, and no inflammatory capsules. Acetic acid renders the amorphous matter more transparent, and ether collects together in globules the fatty granulations.

The tissue of the corpus callosum, soft and pulpy, is seen under the microscope, abundant with granular amorphous matter; the capillaries, although increased, are not dilated. Several blood corpuscles, with an irregular outline, and a few fatty granulations, as also the nerve fibrils, with their ordinary appearance, form the rest of the preparation, in which, again, there is no inflammatory corpuscle.

The cortical substance of the brain is considerably augmented, both in vascularity and amorphous matter. In the tubercular quadrigemina the dilatation and varicosity of the blood-vessels is so distinct that it may clearly be seen with the naked eye. In the cerebellum the grey matter presents, besides the above changes, a greater quantity than the normal of myelocites.

The cerebral white substance offers a similar alteration: great abundance of capillaries and of granular amorphous matter, irregular blood corpuscles, extravasated in the preparation, normal nerve fibrils, and no cells of inflammation.

In the oblong medulla the blood-vessels of the grey matter are considerably augmented, more so than in the brain, and besides dilated and varicose; the granular exudation is also greater, seeming to be of an albuminous nature, and containing a few oil globules. Two ganglionic cells, one of them bipolar, found in the preparations, were very granular, and more than normally charged with pigment. The fibrils proceeding from them were likewise granular. The white, less congested than the grey substance of the medulla, exhibited an alteration like to that of the brain.

The apparent nerve roots of the pneumogastric, the glosso-pharyngeal, the fifth and six pairs, did not present any abnormal alteration.

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M. Cuzent has read a note to the Academy of Sciences, entitled, Poisoning by Oysters taken on a Bank near a Copper Mine; and Demonstration of the Presence of the Copper in these Molluscs. The oysters in question, he says, came from England; and were taken near Falmouth in the neighborhood of a copper mine. These animals have occasioned, he adds, some symptoms of poisoning.—*Brit. Med. Jour.*

FOREIGN CORRESPONDENCE.

LETTER XXXII.

By PROF. CHARLES A. LEE.

Florence, Oct. 28, 1862.

The autumn thus far has been one of the finest I have ever known. The sky has been cloudless, the sun has risen in splendor and set in glory. At Vienna the weather has become quite cool, and even frosty as early as the fifth of this month; but at Venice I found the climate warm, sultry, and even oppressive. A friend arriving at Vienna on the tenth of October, from St. Petersburgh, found snow in many places quite deep, covering the ground for more than half the distance, while thick ice had formed, and the earth was frozen to a considerable depth. Here the foliage is mostly green, and the weather uncomfortably warm. There are many Americans here, and the city swarms with English tourists on their way from Switzerland. I was very glad to meet my friends Dr. Gould and lady, of New York, who have been residing in Rome for some years past. Mrs. G. was the only daughter of the late Dr. Bliss, of our city, and inherits all her father's virtues. I am happy to find that her pulmonary symptoms, which caused her physicians to advise a change of climate, have, under the genial influence of Italian skies, entirely subsided. Dr. G. has acquired a very respectable practice in the city of Rome, and is the only American practitioner there.

In travelling in this country one is constantly impressed with the truth of Alfieri's aphorism, that, "in Italy nature has always proved stronger than all the evil powers at work to corrupt her." Since the creation of the new Italian empire under Victor Emmanuel the people have begun to emerge from that state of torpor, vice, ignorance, and degradation which long religious and political misrule inevitably creates; but it will be a long time before the land can be regenerated, and the symptoms of degeneracy disappear; vagrancy, beggary, and petty pilfering are still Italian institutions, and always will be, until priestly influence is either destroyed or changed into a different channel. No one can charge me with prejudice on this point, for I have none whatever: but I risk nothing in saying that the priests have at all times fostered mendicancy throughout the Catholic world, as if fearful lest charity should come to an end with the cessation of proper objects on which to exercise it. Indeed, there are extensive fraternities who openly countenance and practise idleness, and make beggary synonymous with holiness. Many of these establishments have been very wisely broken up, and their buildings converted into hospitals, and other public uses—still the orders exist, and the practice of beggary still goes on. Both in Italy as well as in France the marks of a general physical decline are very manifest. I know not whether the population be declining here in number, as the last census of France showed it to be in that country, but there is no doubt of the fact; others may trace it to a variety of political, economical, moral, and domestic sources; I think, however, that very little observation will satisfy the medical man that the causes are rather to be sought for in bad and insufficient food, scarce fuel, scanty winter clothing, impure air, and suffering of every description, aggravated in this country, at least, by lazy, indolent, self-indulgent habits, and all the loathsome vices of a decrepit civilization. It is a truth in animal no less than in political economy, that "the wages of sin is death." It is not only the rabble of these Italian cities that exhibit these symptoms of degeneration and decay, but the great mass of the laboring peasantry appear puny and under size, and at forty exhibit all the marks of premature old age. Statistical inquiries show that the mortality of the large cities in Italy, such as Turin, Bologna, Rome, Naples, etc., far exceeds that of London or Paris, while the average duration of life of the laborers in the rice plantations of Piedmont, etc., does not exceed thirty years; and even the old cities of Novara, Vercelli, Mortara, etc., suffer severely from the vicinity of the pestilential fields. It is true that some measures have been taken to lessen the evil by limiting the cultivation of rice to certain districts, fixing the maximum of land to be employed for this purpose by each proprietor, and removing it as far as possible from crowded habitations. It is alleged by some that the low flats where rice is cultivated have always been, and ever will be marshy and swampy, and that the alternative lies between rice-grounds and unreclaimed quagmires; that not only is the unwholesomeness of the territory by no means to be ascribed to the cultivation of rice, but that it is to some extent kept under control by that very system of cultivation; the only means of turning the lands to the best advantage being in fact also the sole means of subjecting the unavoidable malaria to certain rules, and keeping it within certain bounds. Whether these arguments are sound or not I shall not undertake to decide, but it is very certain that no love of gain should ever interfere with those considerations for the preservation of human life, and those measures concerning the public health, which ought always to be the paramount object of all legislation.

The Italians have never been very celebrated for cleanliness, either as regards their habitations or their persons. The streets of their large cities are kept in a better condition than I had expected to find them; but still, owing to bad sewerage, or none at all, they abound in all kinds of unwholesome smells, not less numerous or pungent than those of Cologne; and even their "Grand Hotel de New York," fronting on the Arno, and frequented by hosts of English and American travellers, is not wholly exempt from criticism on this score. This, like most other Italian cities, is very flat, and drainage exceedingly difficult: under these circumstances we can hardly expect an atmosphere of very great purity. Another fact worthy of notice in this connexion is, that the old houses have no water-closets nor privies, and the only resort is, therefore, the public street. This nuisance pervades all the cities of Italy, and it is strange that there are no municipal regulations whatever to remove the evil. Even this fair city of Florence, which is regarded by many as the gem of Italy and the beauty of the whole earth, is polluted in its very palaces and churches by abominations that reek to heaven, and cause Hygeia to hide her head for very shame. Were I a citizen, I would be willing to compromise in the exchange of a few score of the second-rate paintings in the public galleries for clean streets and a pure unscented atmosphere. The "yellow Arno," alias the muddy river, would possess tenfold more beauty in my eyes, if it could only carry to the ocean the superabundant filth which now accumulates in, and pollutes the precincts of the city and its environs. However *æsthetic* the Italians may be in their intellectual and moral tastes, I am certain they labor under a very imperfect development of the olfactory nerves; and this is very remarkable, considering that their auditory apparatus is adapted to the appreciation of the finest sounds and the most delicate vibrations. It may be that, as in the case of the blind, the over-cultivation of one sense has quite obliterated the other.

It is a singular fact that men in this region, when they reach about the age of thirty-five or forty, though apparently in good health and the perfect possession of their faculties, often exhibit the marks of old age. Fat seems to be their great enemy—the result, doubtless, of their indolent sedentary habits and unwholesome diet, to say nothing of the sensuality for which they have always been distinguished. This flabby and torpid obesity, which characterizes nearly the whole nation at that period of life, is generally attributed to the enervating effects of the climate, instead of any violation of the laws of health, as it undoubtedly is. When we see men below the middle age so fat and corpulent as hardly to be able to walk about, or even waddle along the streets, it may be very convenient and satisfactory to lay it all to the climate, but I am inclined to attribute it to causes not quite so complimentary and exonerating. But a still more remarkable fact is, that bilious and phlegmatic as the Italians are by nature or habit, they imagine they are always laboring under the inconveniences of a sanguine temperament, and are therefore ever in bodily fear of a *colpo di sangue*, or blood-stroke, and fear no ills except such as arise from excess of blood; and I am sorry to find their physicians generally humoring those notions, and consequently for ever bleeding, leeching, and cupping them; it would seem for the very purpose of ridding them of that excess of health which troubles them so much. In spring, I am told, there is universal bleeding, as there used to be with us; there is bleeding after a fright, or any sudden or violent emotion, such as falling down stairs, or falling in love; the lancet is a panacea for moral no less than physical infirmities, and for every pound of good blood lost, cold stagnant lymph, such as we might expect to be generated from maccaroni, turnips, and cauliflowers, is gradually substituted in its place. I am informed, also, that in most cases of fever, inflammation, and even consumption, the veins are drained to the last drop; the physician contending to the last that the patient is being choked or drowned in his own blood. So it was with the late Count Cavour; so it was with King Victor Emmanuel's brother, the late Duke of Genoa, who, while dying of slow decline, perished in the act of the ninth bloodletting within two days.

This bilio-lymphatic temperament of the Italian, which so early disables the body, is equally injurious to the tone of the mind. There really is something morbid and distempered in the organization of an Italian, which renders him excessively sensitive and demonstrative. We see it in his want of self-reliance, and his constant craving for sympathy. If we find now and then a Dante or an Alfieri, we meet with crowds of men like Petrarch, Tasso, Metastasio, and Pellico—soft, effeminate beings, who are always blubbering and bemoaning their hard lot. The same causes produced the same results in Byron, who was for ever dwelling upon his sorrows, and thrusting his private griefs before the public gaze; adequate systematic exercise, and regular temperate habits, would not only have warded off corpulence and been an antidote to obesity, but would have saved the world many a dismal croaking. But Italy is not the only country where development is given to the nerves at the expense of the muscles, nor where the whole system of education is wrong from beginning to end. The mischief begins here in the cradle, where infants are still all but smothered in their old-fashioned swaddling-clothes—a fatal and barbarous custom, which fills the Italian cities and towns with crippled, bandy-legged, and deformed persons. Children of the better classes are generally sent out to nurse, and if they survive they are brought back to the pampering luxury and indulgence of their parents' homes. Besides keeping late hours, and partaking, even to surfeit, of the fare of grown-up people, they are humored in all their whims and fancies, glutted with sweets, wines, liqueurs, and all kinds of stimulants, and the ruin of their constitution keeps pace with the ruin of their tempers. I have heard it remarked that, although you may meet handsome men and women in Italy, you rarely see a beautiful child—at least none of that rosy loveliness that prompted the famous pun of old Pope Gregory, about "Angles and Angels." My experience, thus far, confirms the truth of the remark, for I have seen few if any, as yet, but yellow and green, pale, puny, peevish, "knowing" creatures, too small in size, yet too old in face for their size. So far as I have yet observed, there is very little attention paid in Italy to physical education. Playgrounds are deemed wholly unnecessary in connexion with educational establishments, whether male or female; and I doubt whether such a thing as a gymnasium was ever heard of in this country, until within a few years past. There is often great precocity of growth and development, but instead of being the effect of climate, as generally supposed, it is in reality the result of improvident, unwholesome training. The intellect sometimes seems to derive apparent benefit from this unnatural development of the sensitive organs; but if "a sound mind in a sound body" be desirable, then the whole system of training is faulty, for it creates too great a disproportion between the mental and physical powers. The Italians are no sportsmen, nor can they be induced to engage in those athletic games in which Englishmen and Americans so much delight; and here again the climate comes in as a satisfactory explanation.

These general remarks will, of course, be received with all needful indulgence. I am comparatively a stranger here, and am liable to error; but for all the statements above made I am supported either by my own observation or the authority of intelligent, well-informed Italians. In regard to bleeding, however, I am satisfied no general statement would be safe as regards the frequency with which it is resorted to in what is called the Italian kingdom. We must recollect that there is yet no union, not even political, and that very widely different modes of thinking and of practice prevail in the different provinces, and even among physicians in the same province. There are also different schools of medicine, each of which has its advocates and its disciples. Tommasini and Rasori are yet influential names, and have their followers who believe implicitly in the depletory methods of treatment. So also Brown yet lives here, and his system of stimulation has numerous and powerful advocates. "The School of Bologna," so called, is yet influential in many parts of Italy, and its disciples freely use the lancet, and eschew stimulants. In point of fact, bleeding is rarely practised in Tuscany or in the Neapolitan provinces, while in Piedmont and Lombardy venesection and leeching are the great remedies in almost all diseases. In Tuscany, I am told, the faculty have no faith in medicines proper, while in Naples, Lombardy, and Piedmont, they trust them implicitly, and even believe in specifics.

In my next I will give some notice of the hospitals and museums of this city.

American Medical Times.

SATURDAY, MAY 2, 1863.

SPECIALISTS IN MEDICINE.

The Commissioners of Charities and Corrections of this city have addressed a communication to the Medical Board of Bellevue Hospital inquiring as to the propriety of establishing specialties in that hospital, instancing diseases of the eye, the ear, the nervous system, and skin diseases. They inquire also as to the propriety of introducing other specialties. The inference would seem to be that the diseases in the hospital might be classified according to the modern views of specialists, by arranging a large number of subdivisions.

The questions proposed to the Medical Board by the Commissioners bring prominently before the profession the much agitated subject of specialties in practical medicine. We trust it will receive the dispassionate consideration of that body, for on its decision will depend, to a certain extent, the initiative movements of specialism in this country. It should also receive, in a wider and more general sense, the earnest attention of the profession at large, and such policy should be adopted for the encouragement or discouragement of these special studies as will best promote the interests of medicine.

The tendency of the age is undoubtedly to the division of labor. We see it in all the mechanic arts and in every department of human labor and thought. It grows out of the limited powers of the human body and mind, and the constant expansion of every branch of science and of every department of industry. Not all minds can grasp the widely varying facts in any one of the generally recognised divisions of the sciences, much less become profoundly conversant with them. Neither can the artisan become proficient in many branches of the same business. He who is recognised as a "Jack at all trades" cannot excel in any one art, though he may be a most useful person by his general knowledge.

Medicine, as a science and an art, has not escaped this tendency to the division of labor. The three grand divisions, practical medicine, surgery, and obstetrics, have long been recognised and adopted. They very naturally grow out of fundamental differences in methods of treatment of diseases. Surgical affections require, for the most part, entirely different remedial agents from medical diseases; and the practice of obstetrics differs equally from both in the appliances of art. In the progress of the medical sciences many of the classes of diseases embraced in these several grand divisions have become objects of special study, as the diseases of the eye and ear in surgery, of the heart and lungs in medicine, and of the uterus in obstetrics. These divisions have gradually become more and more numerous, until surgery, medicine, and obstetrics are little else than an agglomeration of specialties. The necessity of pursuing the study and subsequent practice of a specialty in order to success, is beginning to possess the minds of young medical men. They are stimulated by the examples of men who have won reputation and fortune by devotion to a specialty. It is time that this subject was thoroughly discussed in all its bearings, that the younger members of the profession may have correct views of the advantages or disadvantages of pursuing a specialty.

The arguments generally brought forward by the advocates of specialties in medicine are, as we have already intimated, those which apply to a division of labor in any other department of business. And they have great plausibility. To surpass all contemporary laborers in any special pursuit requires the undivided efforts of every ordinary mind. But we are not prepared to accept this reasoning in an unqualified sense. As a general fact we must aver that the man whose knowledge in business takes the widest range has the best basis for success. This fact is eminently true in medicine. The general surgeon, physician, or obstetrician, will prove a better practitioner in any particular disease than the specialist. The most successful surgeon is the man who has also a thorough knowledge of practical medicine. The relations of diseases are intimate, often obscure, and frequently all-controlling. The practitioner who fails to detect these relations will certainly not be a good practitioner, whatever may be his pecuniary success. He will treat diseases in his specialty from the most narrow stand-point, and too frequently fail to comprehend those remote agencies and widely extended sympathies which most seriously modify their progress. These peculiarities the general practitioner anticipates and readily recognises, and promptly meets every manifestation with proper remedies.

It has been remarked by an accurate observer of the progressive changes in the medical profession, that the older practitioners often much excel the younger in the treatment of disease, because they take a much wider range of symptoms, and do not narrow their view to single organs and individual diseases. There is much truth in the remark. The recent graduate has his mind pre-occupied with scholastic divisions and subdivisions of diseases of individual parts, and in his analysis he becomes more and more restricted, until the attention is fixed upon a limited, perhaps an insignificant part of the subject under investigation. The same is true of the pure specialist, as the term is now employed. In general he is necessarily a poor practitioner, and though he may more correctly interpret the signs of pathological changes than others who have studied the special forms of disease less minutely, he will show but little skill in employing remedies. If we contrast also the usefulness and the rank in the profession of the general practitioner with that of the specialist, we shall see clearly that the studies of the former tend much more to enlarge the mind, to strengthen its grasp, and increase its powers of correct analysis.

We shall not pursue this subject further at this time. We are glad that it has been presented to the Medical Board of one of the largest hospitals of the country, and we await its decision with great interest. If any hospital is susceptible of easy classification of the diseases of the inmates, Bellevue may be taken as better adapted than any other; and it is proper that the experiment should be first attempted within its walls.

THE WEEK.

We cannot forbear calling attention to the recent reports in the Medical Times of the successful treatment of gunshot fractures of the thigh by conservative means. The report of twelve cases by Dr. Waters, and the additional reports of Drs. Hodgen and Dare in the present number, deserve the most serious consideration of every army surgeon. The evidences against amputation where nerves and blood-vessels escape injury, as remarked by Dr. Hodgen, and in favor of preserving the limb, are rapidly accumulating. It is one of the most interesting and important points in military surgery, and we hope to see the proper treatment permanently settled by our surgeons.

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The exaggerated reports of sickness in the army of Gen. Grant are copied into the London *Lancet* from the correspondence of an Iowa paper. If such terrible sickness and mortality are taken as an index of the condition of our armies, the speedy failure of the Union Cause will be still more evident to every English reader. But we have assurances from the most reliable sources that these reports are the grossest and most unfounded exaggerations. Gen. Grant has himself contradicted the reports, and Mr. Frederick Law Olmsted, Secretary of the Sanitary Commission, who visited this army at the time alluded to, also states in the most positive manner that the Army of the Mississippi was in a fair condition of health.

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The suggestions of Medicus in regard to a notice in the City Directory of the office hours of physicians are worthy of the attention of the profession. It would be a great saving of time to both physician and patient if the office hours of the former could be ascertained before applying for treatment. It would be still better if the profession of the city and country had its own Directory, with all necessary details, as location, school of graduation, etc., etc. But we have little hope of the success of such an enterprise since the failure of the late Dr. Tucker's effort to publish a Medical Directory for this city. His efforts failed through the disgraceful penuriousness of the profession. Many subscribed for copies of the work, the price of which was but *fifty cents*, and then refused to pay for it when delivered to them. And yet the work was the result of a year's labor of a most competent physician, and abounded with the most useful local medical statistics. It was the design of Dr. Tucker to make an annual publication, illustrated with engravings, had he met with any encouragement. But a large portion of the edition remained unsold, though subscribed for. There is little prospect of any similar publications succeeding.

Correspondence.

THE LUNACY COMMISSION BILL.

[To the Editor of the American Medical Times.]

Sir:—Dr. Chapin, of Brigham Hall, Canandaigua, remarks in a letter addressed to you, that the Bill of 1861 for the creation of a commission in lunacy, while it contained many excellent provisions, embraced however some that were objectionable, or at least calculated to arouse opposition and defeat the great object contemplated in the existence of such commission—namely, *The relief of unheard sufferings of our insane!* Considering the importance of the bill, the difficulties mentioned by Dr. Chapin are perhaps not so great as to prevent its adoption; and, although I have not been able to procure the text of the bill, I venture to present you the following reflections.

Relating to the actual manner of *procedure* in the criminal cases in which either sanity or insanity are doubted, there is no reason why trial by jury should be avoided; let it be the grand jury or a court, if a board of experts (supposing the commission of lunacy) receives the mission to report on a case, there is no *intrusion* of such board in the decision of judges or juries; their report is but an evidence in the case. From what I perceive, I fear there exists some misunderstanding or *qui pro quo* about medical and judicial functions. For instance, I heard the honorable Judge Barnard in a charge to a jury try to give a medico-psychological lecture to a jury; the Honorable Judge Manierre has tried the same thing at Chicago, with, it appears, some more success. But, really, is that the duty of judges? Now, when physicians are consulted on medical points, could they not also leave to judges and juries to appreciate the facts, and see whether these facts carry responsibility or not? It is certainly as out of order to see a physician assuming duties which do not belong to him, as it is to hear a judge defining the kinds and degrees of mental disturbances which should, in his opinion, be sufficient to excuse or aggravate the commission of crime. In a paper printed in one of the last numbers of the *American Monthly* of Dr. Douglass, I have tried to mark the differences existing between a *legal diagnosis of crime* and the *medical diagnosis of insanity;* let me add now, sir, that the opposition which may exist between two liberal professions is more apparent than real; the gentlemen of the bar and the bench would not punish the insane poor for our very little quarrel with them. If there is sometimes amongst us a slight opposition in a court, it does not exceed the *necessity of the case*, and this latter being over, lawyers and physicians resume their mutual friendship and benevolence.

Respecting the second difficulty, I am not aware of the obstacles that the bill of 1861 threw in the way to admission of patients in private asylums: but, sir, you have, in your editorial of the 7th March, of this year, related that a physician in England was heavily fined for mistaking a case in granting a certificate and *committing* a sane person to an asylum. Now, two points are to be considered: first, if we describe accurately all the symptoms observed, both mental and corporeal, our duty is accomplished. Secondly, our conclusions, whether for or against the commitment to an asylum, are submitted to the judicial or civil authority for a *decision;* then the judicial officers have a right to reject our evidence and take that of another physician, if convenient; the County Judge of an asylum has the same right; the foreigner may be a Canadian or a European, the fact of his insanity is not altered; the judge of the county in which a man becomes insane, or into which he is brought, is competent to decide the case; he requires the report of two physicians, *known to him*, and the ends of justice are thus accomplished.

In spite of these reflections on the letter of Dr. Chapin, I beg to state that I fully appreciate the motives which have prompted the fears of our distinguished colleague.

Yours, etc.,
I. Parigot, M D.

April 20, 1863.

IMPROVEMENT IN THE CITY DIRECTORY.

[To the Editor of the American Medical Times.]

Sir:—As the time approaches for the issue of a new City Directory, I venture to make a suggestion through the medium of your columns to the profession in the city, viz. to adopt the custom very general in European cities of inserting the office hours with the name. As thus:—

A. B., physician, 8 A.M. to 10 A.M.
C. D., physician, { 7 A.M. to 9 A.M. / 3 P.M. to 5 P.M.

The publisher of the Directory would probably charge a small sum, say twenty-five or fifty cents, for the additional insertion. The convenience of such a plan must be obvious. A physician wishes to send a note and get an answer, or make an appointment with a brother practitioner, or send a patient for an opinion; he thus knows the hour to send, and much time and trouble are saved to both parties. Every respectable druggist keeps a directory in his shop, so that it is accessible to all of the profession who do not themselves keep it.

Again, we frequently lose calls from our professional brethren from out of town, who find our city distances long from the hotels where they happen to be stopping, and after travelling to our residences are disappointed in not finding us at home.

Medicus.

[To the Editor of the American Medical Times.]

Sir:—I am strongly gratified to observe in the report of an accurate examiner (J. J. Woodward, Assist. Surg. U.S.A.), in part published in the Medical Times, that the unfounded supposition of any form of parasitic or fungoid life or growth being the cause of gangrene is finally rejected. At a comparatively early period of my investigation into the phenomena and causes of the "gangrene" I saw at the Marine Hospital, New Orleans, I had concluded there was no ground in fact for this supposition, and have, in a report on gangrene, now in the hands of the Secretary of the N. Y. State Medical Society, adduced many facts in proof that no foreign organism or fungoid growth can *cause* that destruction of the tissues which constitutes gangrene, but that, on the contrary, where these organisms exist and increase, as parasites on the animal body, their influence or effect is to *increase* the functional activity of the part they abide on.

I think we may congratulate ourselves that *some knowledge* of the nature of this terrible disease is taking the place of the previous infantile notion respecting its causes. Moreover, I was already convinced that the finding of parasitic forms in the seat of such destruction of the tissues would not prove them to have been the cause (*i.e.* physical *antecedent*) of it, but on the contrary would prove that they arose as a *consequence* of it, which furnished a nidus for their rise and development.

In the report alluded to I have hinted what I regard as the rationale of the disease, so far as my present knowledge of the phenomena and a correct insight into them would justify, and I hope eventually to present a more complete view, so far as future experience and analysis of facts will extend my present understanding of its actual *causes*.

Yours, etc.,
Rufus King Browne, M.D.

THE SUPPLY TABLE.

[To the Editor of the American Medical Times.]

Sir:—I think you ought to explain your criticism on Dr. Otterson's article on Camp Diseases, etc., in the number of April 11th, by stating the fact that, when that article was written, the *new* supply table, Oct. 20, 1862, had not reached him (then with Gen. Curtis in S. W. Missouri), and at that time the statement he there makes was true. As regards the iron preparations which you speak of in the *new* table, while he was writing from the *old*, please note this, for I cannot think you desire to do injustice to a faithful and efficient public servant and an excellent medical officer, who only has his whole heart in the welfare of his command, and a deep interest in everything that pertains to the efficiency of his profession.

M.D.

Army Medical Intelligence.

SPECIAL ORDERS, No. 70.

Headquarters, 16th Army Corps,
Memphis, Tenn., April 14, 1863.

1. Contract Surgeon Cullen, heretofore assigned to the Small-Pox Hospital, having through cowardice and personal fear refused to perform the duties to which he has been assigned, and thus proved himself a disgrace to an honorable profession, and useless to the public service, is dishonorably discharged the service of the United States, with loss of all pay and emoluments. Surgeon B. J. D. Irwin, U.S A., will endorse this order on his contract, and annul the same, reporting his action to the Surgeon-General.

By order of Major-General S. A. Hurlbut,
(signed) H. Bonmore,
Asst. Adj. General.

Official.

B. J. D. Irwin,
Surgeon, U.S.A., Supt. of Hospitals

SPECIAL ORDERS, No. 182.

War Department, Adj. Gen'l's Office,
Washington, April 21, 1863.

4. Assistant Surgeon E. M. Jones, 2d Rhode Island Vols., is hereby discharged the service for incompetency, as recommended by a Board of Examination.

9. Hospital Steward Myron W. Robinson, U.S.A., is hereby honorably discharged the service of the United States, to enable him to accept the position of Assistant Surgeon, 6th Connecticut Vols.

12. The following assignments are made of Medical Officers:

Surgeon J. Owen, U.S.V., recently restored, to report for duty to Brigadier-General Carleton, commanding Department of New Mexico.

Surgeon James Fisher, U.S.V., now on duty in this Department, where his services are no longer required, to report to Major-General Banks, commanding Department of the Gulf.

Assistant Surgeon Thomas H. Ridgely, U.S.A., now on duty as Medical Purveyor at Frederick, Md., where his services are not needed any longer, to report in person to Major-General Grant, commanding Department of the Tennessee, and by letter to the Assistant Surgeon-General at St. Louis, Mo.

Surgeon S. S. Mulford, U.S.V., just promoted, to relieve Surgeon T. M. Getty, U.S.A., as Medical Director, 4th Army Corps, Yorktown, Va.

Surgeon T. M. Getty, U.S.A., to relieve Surgeon H. R. Wirtz, U.S.A., as Medical Director of the Department of the Northwest.

Surgeon H. R. Wirtz, U.S.A., to relieve Surgeon Charles H. Crane, U.S.A., as Medical Director of the Department of the South, inasmuch as Surgeon Crane has been on continuous duty in that Department for nearly two years.

Surgeon M. Goldsmith, U.S.V., on duty in Louisville, Ky., to report by letter to the Surgeon-General for special duty connected with the Medical Department in that vicinity.

Assistant Surgeon William E. Whitehead, U.S.A., recently appointed, to proceed to St. Louis, and report for duty to Assistant Surgeon-General R. C. Wood, U.S.A.

By order of the Secretary of War,
E. D. Townsend,
Assistant Adjutant-General.

Surgeon Isaac Wixam, 16th Michigan Vols., having been tried by Court-Martial, and found guilty of "misapplication of provisions and other stores belonging to the United States," has been sentenced at his own expense to make good the loss of the United States, which the Court finds to be of the amount of one hundred and fifty dollars, and to forfeit to the United States all pay and emoluments now due him, and to be dismissed the service of the United States.

Leave of absence for thirty days has been granted to Assistant Surgeon N. Nickerson, 16th Connecticut Vols., on Surgeon's certificate of disability.

Surgeon A. M. Leonard and Assistant Surgeon D. W. Onderdonk, 151st New York Vols., have been discharged the service for incapacity, as reported by a Board of Examiners, instituted by Special Orders 93, current series, 8th Army Corps.

Surgeon Lincolu R. Stone, 2d Massachusetts Vols., has been honorably discharged the service of the United States, to enable him to accept a position in the 54th Massachusetts Vols.

Surgeon Thomas O. Osborne, 26th New Jersey Vols., has been mustered out of service for incompetency.

Surgeon C. M. Carleton, 16th Connecticut Vols., has been discharged the service on Surgeon's certificate of disability.

Leave of absence for thirty days has been granted to Surgeon J. P. Colgan, 59th New York Vols., and to Assistant Surgeon A. House, 14th New York Vols.

Leave of absence has been granted to Acting Assistant Surgeons S. Sprague, for fifteen days, A. F. Stanley, for ten days, and F. Hinkle, for seven days.

Drs. Harvey E. Brown of New York, J. T. Calhoun of New Jersey, E. J. Darken of Connecticut, and W. E. Whitehead of Pennsylvania, have been appointed Assistant Surgeons in the regular army.

Assistant Surgeon G. S. Little, 97th New York Vols., has been dismissed the service by sentence of Court-Martial, for conduct unbecoming an officer and gentleman, and for striking a superior officer while in the discharge of his duty.

Assistant Surgeons S. D. Carpenter, A. F. Sheldon, G. L. Sutton, E. J. Whitney, C. W. Horner, R. J. Levis, R. S. Kenderline, C. N. Chamberlain, John E. McDonald, Peter Cleary and R. R. Taylor, U.S.V., have been promoted Surgeons of Volunteers.

Assistant Surgeon C. F. Haynes, U.S.V., has been assigned to duty at General Hospital No. 1, Nashville.

Assistant Surgeon E. W. Thurm, U.S.V., has been promoted Surgeon of Volunteers.

Assistant Surgeon Jas. H. Peabody, U.S.V., now at the Virginia Hospital, St. Louis, Mo., has been ordered to report for duty to Assistant Surgeon-General R. C. Wood, U.S.A., at St. Louis.

Surgeon R. M. S. Jackson, U.S.V., to report to Major-General Burnside, commanding Department of the Ohio.

Assistant Surgeon T. G. Fritz, of the 3d Indiana Cavalry, now on duty in the Army of the Potomac, to report to the Medical Director, Department of the Cumberland, for duty with the detached companies of his regiment, attached to the 20th Army Corps.

Assistant Surgeon R. S. Kenderdine, U.S.A., has been assigned to duty in charge of the General Hospital, Broad and Prime streets, Philadelphia, Pa., and as Medical Director of Transportation in that city.

Surgeon S. F. Elliott, U.S.V., has been relieved from duty with the 9th Maine Vols., and has been ordered to establish a camp hospital at Hilton Head, S. C.

Assistant Surgeon Franklin Grube, U.S.V., is on duty with the Batteries of the 3d Division, 6th Army Corps.

Surgeon Horace Wardner, U.S.V., has been assigned to duty as Assistant to the Medical Director, Department of the Tennessee, and Inspector of Camps, Hospitals, and Transports.

Surgeon D. G. Rush, 101st Pennsylvania Vols., has declined the appointment of Assistant Surgeon of United States Vols.

Surgeon E. B. Dalton, U.S.V., has reported at Fort Monroe, Va., for duty.

Surgeon E. D. Dailey, U.S.V., has reported to General Schurz as Surgeon-in-Chief of 3d Division, 11th Army Corps.

Surgeon James C. Fisher, U.S.V., has returned from sick leave, and reported to the Medical Director in Washington, for duty.

Surgeon J. G. Hatchitt, U.S.V., has been assigned to duty as Medical Director of the District of Eastern Kentucky, Ashland, Ky.

Surgeon J. G. F. Holston, U.S.V., has been assigned to duty as Medical Director, 13th Army Corps, relieving Surgeon J. S. Bobbs, U.S.A.

Surgeon Lewis Dyer, 81st Illinois Vols., has been dismissed the service of the United States with loss of all pay and allowances now due or that may become due him, for accepting money for discharging soldiers on certificates of disability.

Surgeon W. T. Thurston, 1st Rhode Island Artillery, has been honorably discharged the service of the United States on account of disability.

Leave of absence for thirty days has been granted to Surgeon C. H. Laub, U.S.A., late Medical Director, Department of the Tennessee.

Assistant Surgeon John Trenor, Jr., 2d New York Cavalry, having tendered his resignation, has been honorably discharged the service of the United States to date April 5th, 1863, he having accepted an appointment as Assistant Surgeon United States Vols.

Surgeon W. J. Duffee, U.S.V., has been honorably discharged the service of the United States on account of disability.

Surgeon E. D. Kittoe, U.S.V., has reported for duty as Chief Surgeon 8th Division, 15th Army Corps.

Surgeon D. Stanton, U.S.V., lately in charge of Camp Chase Hospital, has been assigned as Superintendent of Hospitals at Columbus, Ohio, and vicinity.

Surgeon F. H. Gross, U.S.V., has relieved Surgeon William Clendenin, U.S.V., as Medical Director, 14th Army Corps.

Surgeon G. L. Sutton, U.S.V., has relieved Assistant Surgeon W. E. Waters, U.S.A., in charge of the Emory Hospital, Washington, D. C. Dr. Waters is on duty as Acting Medical Inspector in the Department of Washington.

The Academy General Hospital at Newbern, N. C., has been closed, and Surgeon C. A. Cowgill, U.S.V., lately in charge, has been assigned to the Stanley Hospital, same city.

A Medical Board, to consist of Surgeon A. M. Clark, U.S.V., Surgeon David McKinney, 134th Pennsylvania Vols., and Assistant Surgeon J. S. Billings, U.S.A., has been ordered to convene at the Headquarters 5th Army Corps, on the 11th inst., for the examination of such Medical Officers as may be ordered before it.

Surgeon R. M. S. Jackson, 11th Pennsylvania Vols., and Assistant Surgeon A. C. Benedict, 1st New York Vols., having tendered their resignation, have been honorably discharged the service of the United States.

The muster into service of E. Church, as Surgeon 26th Michigan, of date November 16, 1862, has been revoked, he having entered on duty in that regiment without a proper discharge from his former command, from which he was reported absent without leave, and on the rolls of which he is reported for disobedience of orders.

The resignations of Surgeons Thomas G. Catlin, D. Hayes Agnew, A. C. Bournonville, and W. M. Breed, U.S.V., have been accepted by the President.

Leave of absence for fifteen days has been granted to Surgeon S. S Mulford, U.S.V.

Medical News.

Sensible Advice.—Dr. Miner, editor of the *Buffalo Med. and Surg. Jour.*, addressed the graduates of the Buffalo Medical College as follows: "He desired to do this for the benefit of the young men who are just entering the field of medical knowledge, that they may not neglect the longest lever of professional power, by which alone they may move the medical world. Medical colleges and their professors are a great power, and wield a wide influence, especially over medical students, and thus also over medical men. We are taught by them, however, in our pupilage the established and universally acknowledged principles of medicine, surgery, and the collateral sciences, while in actual practice we consult our written guides; then it is, that those only who write, are those who teach. Standard medical books are also a great power in the profession, but they are also dependent in great degree upon the Periodical Medical Press for both the material of which they are composed, and their adoption by the profession. Again, many physicians do not carefully read the voluminous works in medicine, while it is believed that all are more or less acquainted with periodical medical literature. These suggestions are made that this graduating class may not be unmindful of the importance to them of medical journals. You may be of value to the journals, but the journals are of vastly greater value to you. They are practically the only available medium of communication with the profession; through them you will learn much of what you will know, and whatever of any professional importance is ever known of you, will be through such medium. Your attention is therefore called to the periodical medical press, as the all-powerful influence in the profession."

Dr. Hullin, in his work on *Medicine and Surgery* lately published, tells how he got rid of a pencil five *centimètres* long and six *millimètres* thick from the bladder. He made his patient retain his urine for as long a time as he possibly could; and when he could hold it no longer, to lean over a table, to grasp its edges firmly, make a deep inspiration, and then force out the urine with all his might. On the very first attempt, the pencil flew out to some distance, and without causing any great pain. M. Hullin recommended this plan from a knowledge of a hydrostatic law. When a vessel with a narrowish opening at the bottom is filled with water, and the opening is suddenly set free, the liquid in escaping makes a whirling motion at the opening; in this whirl floating bodies are seized, and turned so that one of their extremities is presented to the opening. The bladder represented the vase in this case. M. Bousquet says that the former M. Sedillot relieved himself in a similar way of several small calculi.—*Brit. Med. Jour.*

Prof. F. H. Hamilton, now a Medical Inspector in the regular army, was taken prisoner on route from Murfreesboro to Nashville. He was compelled to march on foot fourteen miles with the other prisoners, without rest or food. He was finally allowed to return to Nashville.

Original Lectures.

LECTURES ON DISEASES OF THE EYE.

By HENRY D. NOYES, M.D.,

ASSISTANT SURGEON N. Y. EYE INFIRMARY.

LECTURE III.

ENTROPIUM—ECTROPIUM.

Entropium.—The border of the eyelid may be turned upon the globe in consequence, first, of great laxity of the lids; second, of spasm of the orbicularis; third, of shrinking of the conjunctiva and fibro-cartilage. The first of these causes is a passive condition found sometimes in old persons; the second is a frequent accompaniment of other ocular disease, as keratitis, but is seldom a primary affection; the third is by far the most frequent cause of entropium.

If the ciliary border curls inwards, simply from redundancy and relaxation of the eyelids, excision of a portion of the skin will readily relieve it. Temporary relief is given by pencilling the lid daily with contractile collodion. Spasmodic entropium sometimes occurs in chronic conjunctivitis and keratitis. This is often the case with children. The photophobia incident to the primitive disease induces muscular spasm, and if entropium be produced, the fretting of the cornea by the ciliæ in its turn increases the severity of the ocular inflammation. This is the vicious circle which obtains in many protracted cases of so called scrofulous ophthalmia. The remedy for it is to divide the orbicularis by a horizontal incision extending from the outer angle for the length of half an inch. Leave the wound to granulate, and before it will have united enough to restore to the orbicularis its full contractility, treatment may so far modify the ocular disease as to get rid of the excessive photophobia. This little operation would hasten the recovery of many cases which persist for months.

Spasmodic entropium occurs also under conditions of less severity than the above. The palpebral portion of the orbicularis is at fault. It will be seen that there is no deformity of the lids, and that it is easy to redress the entropium with the fingers. To relieve such cases it is necessary to excise those fibres of the orbicularis which lie nearest the ciliæ, together with a narrow strip of skin. The width of the strip of skin need not be more than a quarter or three-eighths of an inch, but the muscular fibres which present themselves should all be carefully dissected off the surface of the tarsal cartilage. This dissection requires the aid of a spatula beneath the lid held by an assistant, or of Snellen's forceps. The edges of the wound may be united by sutures.

But the most important and most numerous cases of entropium are the result of chronic inflammation of the lids. Wherever granular conjunctivitis prevails entropium will be one of its sequelæ. It is found abundantly among the poor of large cities. It is of great importance to bear in mind how the deformity originates. There has been chronic ophthalmia tarsi, or granular conjunctivitis—the palpebral conjunctiva has been hypertrophied, but now is atrophied, and white lines are traced upon its surface, denoting the abundance in it of fibrous tissue. Fibrous tissue becomes developed in the submucous tissue and in the fibro-cartilage—this subsequently undergoes contraction. These processes of degeneration, atrophy, and contraction, cause distortion. The tarsal border becomes thickened, the fibro-cartilage incurvated, the ciliæ turn inwards, the palpebral fissure shortened and narrowed, the tarsal border and eyelids press forcibly upon the globe. To these organic lesions must be added spasm of the orbicularis, to give intensified vehemence to the existing troubles. Under these morbid conditions there is, of course, perpetual conjunctival inflammation; the cornea, if not made opaque already by granular conjunctivitis, soon becomes hazy and vascular. Sometimes it changes shape, because softened by chronic inflammation and squeezed by the eyelids. I have seen several instances of staphyloma, especially of the upper half of the cornea, thus produced. If the disease continue long, complete pannus of the cornea will result. At any rate the patient is in constant distress, and his vision more or less impaired. The disease, moreover, has no tendency towards recovery.

The amount of distortion will vary with the duration and severity of the case. As soon as the eyelashes touch the globe irritation is produced, and to rectify *their* malposition has too often been the only object of the surgeon. Hence the fruitless operations upon the skin of the lid, as if there were nothing more than trichiasis. It must be borne in mind that all the tissues of the lid are involved, and the irritation of the eye may be due as much to the rubbing of the tense and shortened tarsus as to the contact of the ciliæ. The deformity of the fibro-cartilage may be easily seen in its external convexity, and further demonstrated by the difficulty of everting the lids with the fingers.

Treatment.—Removal of portions of the skin and orbicularis cannot and do not meet the indications of these cases. The eyelid may be shortened, but the stiff fibro-cartilage will not be restored to its normal shape. Inversion of the ciliæ is by this method very rarely overcome, while the harsh pressure of the tarsus is never relieved. I cannot speak too strongly of the futility of this operation; sometimes it does injury because the upper lid may be so much shortened as not to meet the lower lid, except by forced efforts; the conjunctiva is thus left exposed during sleep. Various proceedings have been adopted to correct the deformity of the fibro-cartilage, such as a transverse incision across the middle of the tarsus on its mucous surface, coupled with removal of a piece of skin; another is to split the tarsal cartilage into an anterior and posterior lamina by an incision made along its upturned free border, and then to remove a piece of skin; a more severe operation is to lift the eyelid off the globe, and turn it up against the forehead, making for this purpose a vertical incision through its whole thickness at each angle—the lid to be retained for several days in this everted position while the cut edges are touched with caustic. These operations succeed for a time, but when the cicatrices have contracted to their full degree the deformity returns.

These attempts proving so unsatisfactory many surgeons have abandoned the design of saving the eyelashes, aud resort to the operation of "scalping the lids." Mr. Wilde, of Dublin, displays a large bottle full of such trophies, and we resort to it very commonly at the Eye Infirmary. In doing it a spatula is held beneath the lid by an assistant, both to support and to keep it tense; an incision is made through the skin close to and parallel with the border of the lid, and the fibro-cartilage exposed; next incise the tarsal border to the required depth, say a quarter of an inch at its outer angle, and at a point just external to the punctum; lastly, remove the border of the lid with the scissors. A sufficient width must be given to the strip removed to include the whole length of the hair follicles, and if stumps are found protruding from the cut edge they must be carefully cut away. The slight irregularity of the border which is caused by the use of scissors disappears as the wound heals. No sutures are needed or other dressing than cold water. It is not well to operate on both eyelids of the same eye at one sitting, because the raw edges will unite by adhesion. This accident has once occurred to me: the ankyloblepharon was easily removed by passing a probe between the lids. This operation gives relief in numerous cases at the expense of the eyelashes, and of a shortening of the eyelid which sometimes amounts to incomplete closure during sleep. But it sometimes does *not* fully remove the irritation of the eye. The eyelid rubs harshly over the cornea, because by atrophy and contraction of the tissues it has become incurvated and tightened. The remedy for this consists in a permanent elongation of the palpebral fissure. It is done in this way: a horizontal cut is made through the external commissure half an inch long; the wound is, by an assistant stretching it upwards and downwards, made vertical, and the conjunctiva is stitched by fine sutures to the skin. This relaxes the contraction of the orbicularis as well as the mechanical pressure of the lids.

This operation of extending the palpebral opening has been lately employed by several oculists in conjunction with the use of ligatures. Dr. Williams, of Cincinnati, has done this for several years. Dr. Pagenstecher, of Wiesbaden, Dr. Snellen, of Utrecht, have devised different methods of using the ligatures. I think the operations are promising enough to bring them to your notice, and I shall take an early opportunity of trying them. The first step is to cut through the outer angle, and sew the conjunctiva to the skin as I have described; the next step is, according to Pagenstecher, to pass two or three silk threads vertically through the lid, between the fibro-cartilage and the muscular layer, entering at the tarsal border, and emerging through the skin opposite the upper edge of the tarsus; the ligatures are then tied down tightly, and left to cut themselves out. The contraction of the cicatrices is said to succeed in maintaining permanent eversion. The process must be painful, and the skin marred by scars. Dr. Snellen's method is to keep the lid everted by only one ligature; the thread is armed at each end with a short curved needle: both needles are pushed entirely through the lid from its conjunctival surface at the upper border of the tarsal cartilage, the points of perforation being about a quarter of an inch apart; each needle is entered again through its puncture in the skin, and pushed down next to the external surface of the fibro-cartilage and beneath the muscular fibres, until it comes out at the ciliary border; the two ends of the thread are then firmly tied together. The ligature is left *in situ* for three days. It is necessary to pass the needles through the lid as far up to the *cul de sac* as possible, by strongly everting the lid, and the needles must not come out any higher than the ciliary edge. The loop of thread when tied bends the fibro-cartilage so as to make its external surface concave; and it does not create much inflammation of the skin or visible cicatrices like the ligatures of Pagenstecher. Dr. Snellen reports this ligature sufficient to cure moderate degrees of entropium without any enlargement of the palpebral slit. I should not be willing in bad cases to dispense with this valuable part of the proceeding.

It is very desirable to cure inveterate entropium without scalping the lid. If nothing else succeed, this method always remains—like amputation in a bad case of compound fracture of the leg.

Ectropium.—This deformity occurs most frequently in the lower lid, while entropium is most severe in the upper lid. It may be spasmodic and occasional, or organic and permanent. Some persons have the power of voluntarily producing ectropium. Spasmodic eversion sometimes occurs in infants when crying. The formation of their eyelids will predispose to this accident; the palpebral fissure will be too long or the lids be incompletely developed. A case of this kind was reported by me in the MEDICAL TIMES about a year ago. The eversion is produced by the strong contraction of the orbicularis, and remains after the paroxysm of weeping has ceased. The unnatural presentation of the red and swollen conjunctiva alarms the mother, and although easily replaced, its continued recurrence excites conjunctivitis.

Permanent ectropium is much more common than spasmodic, and is caused by thickening of the conjunctiva from chronic inflammation, by cicatrization of wounds, of ulcers, of burns, by caries of the orbit, by lupus, etc.

The annoyance it produces is constant epiphora, dryness and inflammation of the conjunctiva, excoriation of the skin, irritation of the globe, and perhaps keratitis.

Treatment.—Spasmodic ectropium may be overcome by uniting the edges of the lids for a distance of a quarter of an inch or more, as the case requires, at the outer angle. To do this the edges should be refreshed and united by sutures.

To prevent the occurrence of ectropium during the cicatrization of ulcers of the skin, it is recommended to close the palpebral fissure entirely until all tendency to contraction in the cicatrix has ceased. The entire tarsal borders are refreshed and united by sutures, with the exception of a perforation to let tears escape. When it is judged that the danger of ectropium has passed, the palpebræ are separated by simply dividing the line of junction. This is a proceeding I have never seen tried; it may be worth bearing in mind.

Slight degrees of ectropium resulting from chronic conjunctivitis are much relieved by slitting the inferior lachrymal canaliculus; this permits the tears to enter their proper channel, and treatment of the conjunctivitis becomes more satisfactory.

Ectropium from caries must not be attended to until the dead bone has been disposed of. The operation to be chosen for the deformity will depend upon its extent, and upon whether the skin is mobile. For the lower lid, when the skin is supple, a favorite operation is to make a V-incision, bringing the apex well down upon the cheek, raise the triangular flap, and slide it upwards; unite the edges by sutures, and also draw together the wound left by removal of the apex of the flap. By this proceeding from two to four lines may be gained in height of the tarsal border. The same operation is more rarely applied to the upper lid. If a greater effect is required, or if the skin is adherent to the bone, it is necessary to liberate the lid by incisions, and lift it to its place, and then to fill the gap by a flap transplanted from the neighboring skin. This flap may come from the temple, from the cheek, from the side of the nose, from the forehead. The pedicle may be below the middle of the lower lid far down upon the cheek, it may be at the root of the nose, or upon the temple. The essential points of success are to make the flap amply large, to give it a broad pedicle, to twist the pedicle as little as possible—it is rarely necessary to twist it through more than ninety degrees. Care must be taken to leave a strip of skin along the tarsal border to which to fasten the flap by sutures. The wound left by the removal of the flap may be partly united by stitches, and the rest left to granulate. Much may often be gained by extensive subcutaneous incisions of the adjacent skin. Plastic operations on the face are generally satisfactory, if only moderate skill is employed, because the skin is so vascular that there is little risk of sloughing of the flap.

I cannot describe them more minutely without the aid of diagrams, and these you will find in the books.

If ectropium is caused by a small cicatrix adherent to the bone it has been proposed to surround the scar by two curved incisions, whose direction shall be more or less perpendicular to the tarsal border, then to dissect up the adjacent skin by subcutaneous incisions, and unite the edges of the wound *above* the adherent scar, as it were burying it under the integument. This certainly would leave the eyelid more mobile, and perhaps would restore it to place.

After the eyelids have been restored to their proper position, by whatever operation, it often is needful to shorten the tarsal border by excising from it a wedge-shaped piece. The tarsus by its prolonged malposition has become stretched, and is too long for its natural situation. This trimming should, however, be deferred until several months after the original operation.

La Presse Médicale Belge says that M. the Senator Ribacourt has demanded, in the Upper Chamber, the establishment of chairs of homœopathy in the universities of the kingdom. The question is not yet decided; and homœopathy has, therefore, not yet obtained its official chair, salaried by the State.—*Brit. Med. Jour.*

Original Communications.

OBJECTIONS TO THE TREATMENT OF MORBUS COXARIUS

IN ITS ADVANCED STAGES BY EXTENSION, UNLESS PRECEDED BY TENOTOMY.

ILLUSTRATED WITH CASES AND ILLUSTRATIONS.

By LEWIS A. SAYRE, M.D.,

SURGEON TO THE BELLEVUE HOSPITAL.

Since the publication of my report on morbus coxarius to the American Medical Association, in June, 1860, the treatment of this disease by *extension* has become almost universal, and the plan of treatment suggested in the Report has been partially adopted, not only in all parts of this country but also in Europe.

On page 23 of my Report, when speaking of muscular contraction, I state—"But this *constant muscular contraction* exhausts the nervous system and induces hectic fever, gives the child nocturnal spasms of intense agony, caused by pressure of the head of the femur against the acetabulum, and produces absorption of both bones, and prevents nutrition of the limb, which results in atrophy. I, therefore, resort to artificial means to produce this rest and remove the pressure, and *formerly* divided the firmly contracted muscles to prevent the head of the bone from being pressed against the acetabulum, and kept them at rest in the horizontal position in the 'wire breeches' of Dr. Bauer; but now accomplish the same result by gradual but permanent extension by the means of the instrument I have devised, with very much more satisfactory results, and without any danger of anchylosis, or by a weight and pulley as suggested by Sir Benjamin Brodie."*

A more extensive experience has satisfied me that in the advanced periods of the disease we cannot succeed without tenotomy, and as I am partially responsible for the present almost universal treatment by extension, it is due to myself as well as to the profession that I should clearly explain my views in regard to its therapeutical effects.

The object of extension in the inflammation of all joints is to relieve pressure from the inflamed synovial membrane and cartilage. In the earlier stages of the disease *extension* alone will accomplish this object; but in all inflamed joints reflex contractions soon take place, and the muscles become secondarily involved in the disease, and continue thus to complicate it to its termination.

The muscles, by being kept in a state of permanent contraction for a long time, become *contractured*, or structurally shortened, and in this state cannot be stretched or elongated by any amount of extension short of rupture.

On the contrary, any attempt at extension of a muscle in this condition only irritates it the more, and by persistence will produce chronic inflammation of its fibres, which if continued will always end in fatty infiltration and degeneration, after which it will never be restored to its natural contractility and elasticity. And the constitutional effects of a persistent attempt to extend an inflamed muscle are really as bad, if not worse than would be produced by the disease if left to the unaided efforts of nature.

If the object to be accomplished is to relieve the inflamed synovial membrane from pressure, it is obvious that it can be done by extension *only* when the muscles are in a condition to be *extended;* but if they have become structurally shortened and absolutely incapable of *any elongation*, it is equally obvious that no separation of the inflamed surfaces can take place without first making section of the *contractured** muscles.

In some instances the inflammation commences in the muscles, and the joint becomes secondarily involved: in these cases the views here expressed are of still greater importance, as extension will seriously aggravate all the symptoms, *rest* being absolutely requisite.

As I deem these views of vital importance in the treatment of chronic inflammation of *all joints*, and as I have seen a very large number of cases where the extension had been continued for months without benefit, but great injury, and which have been instantly relieved by subcutaneous tenotomy, I will narrate one or two to illustrate the principle which I have endeavored to inculcate in this paper:—

Case I.—C. Pernot, aged 8, 156 Stanton street, was brought to my office in August, 1862, suffering from hip disease in its second stage, the result of a fall received sixteen months previously. She had had all the ordinary symptoms of the disease in its progressive stages, and at the time she was carried to my office she was much emaciated, had very little appetite, suffered intense pain, particularly at night, which was of a sharp lancinating character, and came on by spasms, requiring a very free use of morphine to induce sleep. The limb was immovably fixed in the distorted position of the second stage, and retained there by muscular contraction. Any attempt at motion produced the most intense suffering, and moved the entire pelvis without giving any motion in the joint. Dr. Prince took charge of the case, and applied extension by means of adhesive plaster to the leg, and a weight and pulley over the foot of the bed, the lower portion of which was raised in order to make the body act as a counter-extending force. No benefit whatever was derived from the treatment; but on the contrary her pain became more severe, she required a more liberal use of morphine, lost her appetite entirely, became very greatly emaciated, and at the end of three months the constitutional symptoms had become so much aggravated that the Doctor requested me to see her with him. He had varied the weight at different times from one pound up to eight, but all to no purpose, and he became satisfied that the extension was of no use, but was doing her a very positive harm.

I saw her on the sixteenth of December, and found her much worse than when she was at my office in August; she was much more emaciated, exceedingly irritable, and the tenderness around the joint so great as to preclude all possibility of motion. The adductor muscles of the thigh, the tens. vag. femoris, rectus, and sartorius were very tensely contracted and firm. She was put under chloroform, and I divided them subcutaneously with an immediate improvement of the position, and quite free motion of the joint. No hæmorrhage followed the operation. The wounds were instantly closed by adhesive plaster, without the admission of air; a cloth wet in cold water was applied and secured by a roller around the pelvis and thigh. One-fourth of the weight which had been formerly used was then applied to the foot, and she was left in the bed as before.

The next morning I called to see her, in company with Dr. Winslow Lewis, of Boston, and found her cheerful and happy, playing with her doll, entirely free from all pain, and had been so since the operation. She had taken no opiate, and yet had slept well all night without any spasms, which the mother stated was the first time she had slept well for many months.

From this time all her symptoms improved rapidly, her appetite returned, her sleep was perfect, and all constitutional irritation subsided. The wounds all healed in a few days without suppuration, and at the end of fourteen days I applied my short splint for extension from the thigh, and she immediately began to walk about without pain.

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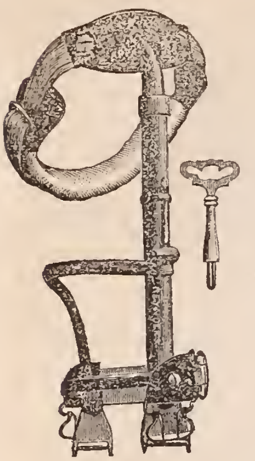
* Chelius' Surgery, edited by South, American reprint, page 296—also page 300.

* I use the term *contracted* to express a shortened muscle, but which is still capable of being extended; and *contractured* when it has undergone *structural* shortening and is incapable of being elongated—similar to Barwell.

In March last she walked from Stanton street to Bellevue Hospital to have her bandages re-applied, and was there exhibited to the students. The limb was nearly the same length as the other, and perfectly straight; the motions of the joint were free and without any pain, and her general health was good. When the instrument was properly adjusted she could bear her entire weight upon the diseased limb without pain, although when it was removed she could neither bear any weight upon it nor have it moved without great suffering. Of course many months will yet be required to effect a cure, but from the many similar cases that I have seen I am satisfied she will entirely recover, and with a useful joint.

Fig. 1.*



Case II.—The following case is from the reports of Bellevue Hospital, and is reported by W. F. Peck, M.D., Senior Ass'st. to First Surgical Division :—

Sabina Donolson, æt. 6 years, is a well formed child, and had always been in the enjoyment of good health up to the commencement of her present trouble, which began August 1, 1861. Her mother states that she was standing on a table, when she accidentally received a fall which gave her some pain at the time. In a day or two after the accident she again engaged in her play as though nothing had happened, and continued to remain free from any unpleasant symptoms until early in October, when she was attacked with a severe pain in her knee, accompanying which there was a noticeable halting in her walk. Her mother thinks she observed this before the pain appeared. The pain, which was of a lancinating character, was most violent during the night. Her parents and others sleeping in adjoining rooms would frequently be disturbed with her justifiable shrieks.

About the middle of November she was admitted into St. Luke's Hospital, where she remained a little more than two months. Extension was kept up during the whole time, but without any benefit; on the contrary, all her symptoms were aggravated.

She was admitted into Bellevue Hospital Jan. 22, 1863, when the following symptoms were observable:—The right foot (see Fig. 2), when she stands erect, is elevated four inches from the floor, and very much adducted. The leg is flexed upon the thigh, and the thigh upon the hip. The pelvis is moderately distorted. When motion is attempted with the femur the whole pelvis moves as though bony anchylosis of hip-joint existed. She has constant pain at the hip-joint, which is most excruciating at night. When pressure is made it is increased. The leg is also much atrophied. Her appetite is fair, and digestion good. Extension was applied for a few days, but seeing that no good result followed the treatment Dr. Sayre proceeded to operate (Jan. 29th) by subcutaneously dividing the gracilis, adductor magnus, longus, and brevis. The wound was immediately covered with adhesive plaster to prevent the introduction of air, and moderate extension applied to the parts. When comparing the length of the two legs the diseased one is found to be only an inch shorter than its fellow. Jan. 30. —The extension relieves her from all pain; before the operation it would have been torture to have kept it applied so continually. She eats and sleeps well. Feb. 2. —The wound made by the operation is now closed, consequently the straps are removed. As long as the extension is kept up she feels perfectly well, but when it is taken off and allowed to remain off her former pain shows itself. Her appetite and digestion are excellent. Feb. 16.—The extension has been continued since the operation without pain. Functions well performed. Dr. Sayre's splint was applied this afternoon, when she walked off with the aid of a crutch without difficulty. Discharged.

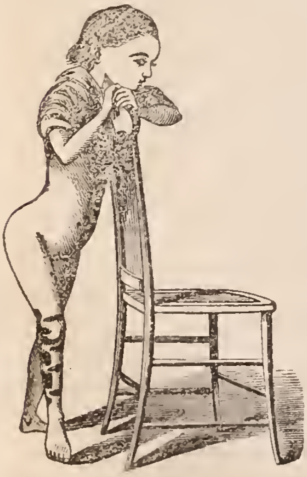


Fig. 2.

April 4.—The patient was brought to the hospital to-day to have her dressings re-applied, they not having been changed since she left the institution. The improvement which has taken place is most marked. Instead of the peevish, irritable disposition which she showed when first admitted she now presents a pleasant appearance, and has the glow of health on her cheeks. Her mother states that she has not even complained since she left the hospital. Her appearance and improved position are well represented in Fig. 2, which was taken from a photograph taken at that time.

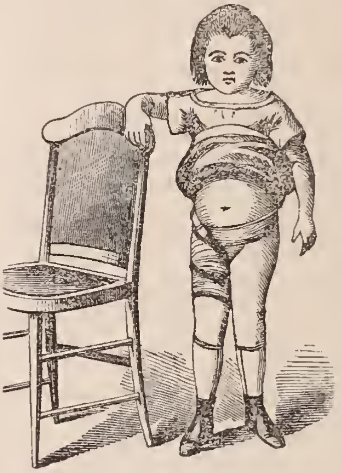


Fig. 3.

Case III.—Jane S., of Chicago, aged 6, was perfectly healthy until four years of age. After running very severely two years ago she came to her mother complaining of very severe pain in her right hip. She was confined to her bed for some days, suffering great pain, and could not bear any movement of the limb. After a few weeks' perfect rest she got around, and walked well for some time.

About a month after she began to have pain at night, particularly in her knee. Dr. Brainard saw her and pronounced it hip-disease, and put her in a splint. Other physicians saw her, who disagreed with this diagnosis.

The disease continued to progress, and after one year she came to New York in 1862, and was placed under the care of Drs. Parker and Sands. They applied extension with a splint, which relieved her very much indeed, and in six or eight weeks she was so much better that they advised her to leave it off, and she returned home, as it was thought, cured.

After a few weeks of exercise with the joint unprotected by extension, she again began to complain of pain in the knee and hip, and in a very short time was much worse than at any other period of the disease. Extension was again applied, which so aggravated all her symptoms that the physician in attendance concluded it could not be a case of morbus coxarius; and after this there was great diversity of opinion, no two hardly agreeing in a diagnosis. She was again brought to New York in March, 1863, and placed under the care of Dr. Peaslee.

I saw her in consultation with Dr. Peaslee, and found her in the advanced period of the second stage of the disease—the thigh flexed on the pelvis, and leg on the thigh, limb everted, elongated, rotated outwards, and immovably fixed in this position. Any attempt to move it in any way caused intense suffering, showing that the anchylosis was from muscular contractions only. Extension could not be endured, and produced as much pain as pressure. The pelvis tilted forward, and the spine was much curved. Emaciation, loss of sleep and appetite, and all the other constitutional symptoms were such as we always find at this period of the disease.

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* The cut, Fig. 1, gives a very good representation of my hip splint, as manufactured by Messrs. Otto & Rynders, No. 58 Chatham st.

On the 10th of March, 1863, assisted by Dr. Peaslee, I divided the adductors, the sartorius, tensor vaginæ femoris, and long head of the rectus femoris muscles sub-cutaneously, closing the wounds with adhesive plaster and a snugly applied roller.

She was under the full influence of chloroform during the operation, and before she had entirely recovered from the anæsthetic the limb gradually assumed its natural position *voluntarily*, without any manipulations with the hand whatever, done of course by the natural contractions of the remaining muscles, which were now left free to act. The pelvis became square, and the limbs of equal length; the curve in the spine was removed, and the anterior superior spinous processes of the ilium became parallel instead of oblique, as they were before the operation, the right one being more than an inch lower than the left. Upon taking hold of the limb all the movements of the hip-joint were perfectly free, and by a very slight extension could be produced without pain.

She was placed in bed with the weight and pulley as usual, and 2lbs. weight applied; this weight has been gradually increased to 5lbs. She slept perfectly quiet all night without any opiate, and has not taken a narcotic of any character whatever since. The wounds all healed in a few days without suppuration, and her general health improved so rapidly that when Dr. Peaslee saw her at the end of three weeks he was much surprised at her remarkable increase of flesh.

She has not lost a meal or a night's sleep since the operation, and in fact has not made a single complaint of any pain whatever, and is now running around with the instrument applied the same as the cases above reported.

My object in publishing this case is to show the importance of keeping on the instrument for a long time after all evidences of the disease have disappeared. In fact, then is the time that it is of the greatest good, as it admits of freedom of motion to the joint, while the child can take exercise in the open air for the purpose of invigorating the general health, and at the same time the joint is guarded from pressure, and thus secured against a relapse; and this should be continued for many months, or even a year or more after they are entirely well.

795 Broadway, April 10, 1863.

CASE OF PUERPERAL TETANUS.

By JONATHAN HAVENS, M.D.,

OF SPARTA, N. J.

As "obstetrical tetanus" is of rare occurrence the following note may be of interest to your readers:—I was called, January 26th, to see Mrs. T., aged twenty-five, the mother of two children. On the preceding Monday, just after an attack of mumps, she had had a miscarriage, being then three months pregnant. She was attended at that time by a midwife, who was certain the placenta and membranes came away. I could not detect them by digital examination. She had been flowing a little all the week. I left her five grain doses of the acetate of lead, to be given every four hours. Jan. 28th.—The hæmorrhage had slightly increased this morning, and as she began to suffer from the loss of blood I introduced the tampon, and left her five grain doses of gallic acid, which she was to take instead of the lead. Jan. 29th.—I removed the tampon, and notwithstanding hæmorrhage had ceased I continued the acid, but less frequently. Jan. 30th.—No hæmorrhage or offensive lochial discharge; no tenderness of uterus. I now discontinued the acid, and allowed a diet of milk, eggs, and beef. Feb. 1st.—I found her doing well, and left the muriated tincture of iron to be taken in ten drop doses three times a day. I found her (Feb. 4th) still improving, and now discontinued my visits. I was called again the second day after, as there was a return of the hæmorrhage. It was, however, but slight. I left her the fluid extract of ergot, of which ten drops were to be taken every four hours. Feb. 7th.—I was called in the evening. The hæmorrhage had ceased. In the morning she had felt a stiffness of the jaws, and thought it was a return of the mumps. I found her with some difficulty of deglutition, and the muscles of the jaws were stiff. The head was occasionally drawn back in tonic spasm. I gave her one-third of a grain of morphine, which I repeated in two hours, under the influence of which the spasms were less frequent and painful. I left one-fourth of a grain, to be given every two hours. She was directed to have liquid and concentrated nourishment and brandy, but did not take much on account of the dysphagia. Feb. 8th.—The spasms were yet confined to the neck and jaws, but were much more frequent and severe. I directed a turpentine enema, and continued the treatment as before. The day following I found the pulse more frequent and feeble, and there was no opisthotonos. Deglutition was impossible. The diaphragm was not affected. I then administered chloroform, of which a small quantity gave her great relief. I taught an attendant how to use it, and directed it to be continued, and nutritive enemata, with sixty drops of laudanum, to be given every four hours. She died early the next morning. No autopsy was made. The case was a novel one to me, but I have since found a valuable contribution on the subject by Prof. J. Y. Simpson, in *Braithwaith's Retrospect*, part 29, page 65. To this I refer your readers, without any remarks upon the case.

Reports of Societies.

UNITED STATES ARMY MEDICAL AND SURGICAL SOCIETY, OF BALTIMORE.

Stated Meeting, Feb. 26, 1863.

SURGEON C. C. COX, U.S.V., PRESIDENT, IN THE CHAIR.

DISCUSSION UPON TETANUS.

[Reported by Dr. Geo. H. Dare, Acting Asst. Surg., U.S.A., Secretary.]

Dr. Cadden stated that he had nothing new to offer on the subject of tetanus, that it was a disease more frequent in warm than cold climates. He spoke of the two varieties, idiopathic and traumatic, and of trismus as a partial form, giving the marked symptoms, and defining opisthotonos, emprosthotonos, and pleurothotonos. The diagnosis between the idiopathic and traumatic forms was to be made by the history of the case, presence or absence of a wound, etc., but when the disease was fully developed both forms manifested the same symptoms and required the same treatment. The only diseases with which tetanus could be confounded were hydrophobia, poisoning by strychnia, and hysteria. The diagnosis was to be governed by the circumstances of the case. Tetanus was liable to result from any kind of wound, particularly lacerated or punctured. He remarked that the treatment of this disease was unsettled and unsatisfactory, death resulting under any treatment in the great majority of cases, especially in the traumatic variety. Autopsy threw little or no light on the pathology of the disease; the neurolemma of the nerves leading to and from the wound was sometimes found inflamed. Little was known of the pathology of the disease, except that it was an affection of the excito-motor system of nerves.

I. OPISTHOTONOS PRODUCED BY PRESSURE UPON THE SUBSCAPULAR NERVE.—II. TETANUS TREATED BY WOORARA.

Asst. Surgeon Uhler read reports of two fatal cases of traumatic tetanus.

I.—A stout Irishman, 50 years of age, wounded at the battle of Fair Oaks, came under Dr. Uhler's care at the Annapolis Hospital, presenting the usual symptoms of traumatic tetanus well marked. He was put under the influence of chloroform in order that the wound might be examined. This was situated on the side of the chest, about three inches below the axilla, and extended between three and four inches in depth. The ball remained in, and all attempts to find and extract it failed. A warm cataplasm containing opium was applied, and opium with tartar emetic given internally; the bowels, being constipated, were moved by enemata, and nourishment in a fluid form was forced freely down him with considerable difficulty. Three hours afterwards the disease had made still greater advances, and opisthotonos was plainly marked. The body was covered with a profuse perspiration, and upon the slightest touch he would start and lapse into a stronger spasm. He was now given chloroform freely by inhalation, but died within three hours without the spasms relaxing to any beneficial extent.

Post-mortem examination revealed in a most beautiful manner the seeming cause of the disease. The ball, a round one, had broken off a piece of the scapula an inch and a half in length, and imbedded itself, with the piece broken, beneath the outer edge of the scapula, pressing upon the longer or lower subscapular nerve. The case was confirmatory of Baron Larrey's remark, "That a wound of the posterior nerves produces opisthotonos, that of the anterior, emprosthotonos."

II.—A small, scrofulous-looking mulatto boy, 14 years old, broke his arm near the middle. The case happening in the country, he was conveyed in a vehicle to the nearest practitioner, who put a bandage on the arm and applied splints. As the mother was coming to the city, he directed her to take the boy to a physician and get him to examine the arm to see that the bandage was not too tight. Engrossed in business she forgot the boy, whom she had left in a wagon, and swelling supervening gangrene ensued. He was admitted into the Baltimore Infirmary. Prof. N. R. Smith amputated the arm at its upper third. On the next day tetanus, manifested by the usual symptoms, supervened. The ordinary remedies having been administered without benefit, Prof. Hammond, now Surgeon-General, proposed to use woorara. Accordingly he introduced three drops of a strong solution into the areolar tissue of the thigh, and stood ready to resort to artificial respiration when the functions of the lungs should cease. The pulse, which was very rapid, immediately began to fall, and in the course of ten minutes came down to forty-five; during ten minutes more it continued to fall more slowly till it entirely ceased, twenty minutes after the introduction of the drug. The patient died in this case either from exhaustion or from the influence of the woorara, which appeared to be exerted upon the circulation, and not, as is ordinarily stated, upon the respiration.

TETANUS TREATED SUCCESSFULLY BY IMMERSION.

Surgeon C. C. Cox reported a case treated successfully by immersion in the river. A large, muscular, colored man had fallen into the fire. The burn extended over the whole of one side of the neck and corresponding arm. He was brought forty miles to be put under the care of Dr. Cox. Dr. C. had given directions that only a part of the burn should be dressed at a time. This precaution was neglected, and tetanus resulted, probably from the cold air acting on so large a raw surface. Being a large muscular man, the paroxysms were correspondingly strong and violent. Chloroform was administered in large quantities by inhalation at every paroxysm to complete anæsthesia, and opium in full doses. For two days and a half the chloroform seemed to be of benefit and to partially control the spasms; at the end of that time it lost its power. Having heard that horses had been cured of tetanus by driving them into the river, Dr. Cox determined to try immersion in this case. The patient was taken by two strong negro men to the adjoining river and plunged in, then taken back and wrapped up in bed, perspiration being promoted. The paroxysms were evidently modified, and their violence diminished. This practice was continued three or four times a day for several days, during which the disease gradually subsided, and the man recovered. Dr. Cox stated that the good effects of every immersion were unmistakably apparent. He attributed the good effect of the cold douche to its sedative action on the spinal system of nerves. Dr. Cox made some remarks on trismus neonatorum, stating that sometimes it assumed an epidemic form in India. He adverted to the proposed method of cure by laying the child on its side in order to avoid pressure upon the occipital bone.

TETANUS SUCCESSFULLY TREATED BY ACETUM OPII, ETC.

Surgeon L. Quick, U.S.V., reported two cases of traumatic tetanus.

I.—Private J. L. Lamer, æt. 25 years, had enjoyed good health, except occasional attacks of remittent fever, previous to enlistment; was wounded at the battle of Williamsburg, May 5, 1862, in the shoulder. Admitted into the Adams' House Hospital May 10th. A gunshot wound was found, the ball having entered at the humeral insertion of the deltoid, and passed upwards and outwards. The medical officer in charge of the case extracted a large mass of lint from the wound. Condition on admission pretty good. May 20.—He complained of what he called cramps in the abdomen, extending posteriorly towards the sacrum and down the legs, also of headache. He was ordered the usual treatment for colic. May 23.—The patient showed some tetanic symptoms, opens his mouth with great difficulty, and was occasionally attacked with spasms affecting nearly his entire muscular system. Ordered: R. Chloroform., spts. ammon. aromat., āā, ℥ ss.; aquæ camph. ʒ ii. M.S. Dose, a teaspoonful every third hour. May 24.—No improvement; muscular rigidity continues, bowels constipated; ordered enemata, pulv. camph., grs. iii., pulv. opii, gr. i., every fourth hour; doses to be alternated with the previous medicine. May 28.—Dr. Quick took charge of the hospital. Patient much the same; sudamina have appeared over the chest and abdomen. Has almost continuous spasm of the abdominal and diaphragmatic muscles. Has had retention of urine, rendering the catheter necessary. Acetum opii (♏x.) is substituted for the camphor and solid opium; the chloroform mixture still continued, with the addition of one drop of chloroform to each dose. Is allowed milk-punch and whatever nourishment he can take. Trismus is very decided, pulse feeble and frequent, bowels do not move except through the action of enemata. Wound is dressed with a strong solution of sulphate of morphia; it looks healthy and is healing. May 29.—Some improvement; patient has slept better; rigidity of muscles somewhat less. The doses of chloroform increased one drop daily at each dose. June 1.—Patient still improving, is more cheerful; muscular spasm less; trismus less; catheter still necessary. June 2.—Looks better than he has during the period of his tetanic attack; has passed his urine once voluntarily, takes more nourishment; sudamina disappeared. The acetum opii has been gradually increased to ♏xx. at a dose, and the chloroform to seven drops more at a dose than at first. June 10.—Muscular rigidity still continues, but the patient is able to open his mouth wider; the spasms are much less frequent and severe. June 11.—The patient passes his urine without difficulty; requires to urinate frequently; his appetite is better, and he is in every respect much improved. He is allowed beef essence and milk *ad libitum*. His wound is granulating slowly; treatment continued. June 20.—Patient is able to sit up; is feeble, but rapidly convalescing; wound nearly healed. June 29.—The patient has abandoned the use of medicine.

is entirely recovered, except some stiffness of the elbow of the affected side. He walks about, and is in every respect cured of tetanus. Dr. Quick stated that the difference in effect between the pulv. opii and the acetum opii was in this case most marked and decided. Dr. Quick remarked that the notes of this case had been furnished by his able assistant, Dr. Wm. E. Small.

II.—While Dr. Quick was engaged to attend the workmen during the widening of a tunnel on the Philadelphia and Reading railroad, one of the workmen received a lacerated and contused wound of the foot by the falling of a small but sharp stone from the roof of the tunnel. Considerable bleeding followed the receipt of the injury, which was arrested by a compress. Secondary hæmorrhage took place, but it was stopped without tying the vessel. Ten days afterwards the man went home ten miles distant on the cars, the wound nearly healed, and looking well. He had no pain, there was no mark of inflammation about the wound, and no foreign substance in it.

Thinking himself well he undertook to walk two miles few days after his return home. A few hours afterwards he was attacked with symptoms of tetanus, and died within forty-eight hours.

With regard to the treatment of tetanus Dr. Quick thought too much stress could not be laid on the propriety of giving liquid instead of solid medicines, the stomach would not appropriate powders, but the absorption of liquids would go on as rapidly as before. For this reason he preferred the use of the acetum opii, and he recommended the free use of nutritious food in a fluid form with tonics and stimulants, and the cautious but bold use of such antispasmodics and sedatives as may be suited to the case. He disapproved of the use of tobacco, enemata, tartar emetic, and other such depressing agents.

(*To be Continued.*)

FOREIGN CORRESPONDENCE.

LETTER XXXIII.

By PROF. CHARLES A. LEE.

BOLOGNA.

Oct. 28, 1862.

There are many institutions in Bologna deserving the attention of the medical man, and which will reward the careful and diligent observer. It is one of those interesting provincial capitals which no country but Italy possesses in such abundance. With its rich and varied colonnades, affording a pleasant shelter from the sun and rain, with clean and well paved streets, noble institutions, and a flourishing, intelligent, and learned population, it may truly be said to rival Rome in all except classical and religious interest, and the extent of its museums. Bologna has always been the most flourishing and the most advanced in an intellectual point of view of all the cities of the Papal States, and since it has been annexed to the kingdom of Italy by the free and universal vote of its inhabitants, it has taken a still more rapid stride in the march of prosperity and intellectual progress. It has never been the residence of a Court or the seat of a Sovereign, but it has always enjoyed ample privileges and perfect freedom of manners, opinion, and speech. Far back in the middle ages the city became independent of the German emperors, and in 1112 acquired an acknowledgment of its independence, and a charter granting to its citizens the choice of the consuls, judges, and other magistrates. The possession of such valuable political privileges has had a most important influence in promoting freedom of thought and individual activity among its inhabitants. In the history of painting *the School of Bologna*, so called, occupies a most prominent place, and numbers among its masters some of the greatest names connected with the art. The names of Guido, Domenichino, and the Caracci must for ever live among those of the great painters of all time. There is also a flourishing College of Architecture here, where pupils are educated till their twentieth year; also an Academy of Music, which is peculiarly appropriate to a city which has the credit of being the most musical in Italy. This institution is over two hundred years old, and has in its library over 17,000 printed volumes of music, and the finest collection of manuscript music in the word. Here may be seen illustrations of all the musical instruments ever invented.

Bologna is the well known seat of one of the most ancient and celebrated universities of Italy. It was founded as early as 1119, and was the first to confer academical degrees. In 1262 there were no less than 10,000 students collected here from all parts of Europe, so that it became necessary to appoint regents and professors for the students of each country. Here the Justinian Code was first taught, and from here a knowledge of Roman law first spread over all Europe; at first the science of law only was taught, but before the commencement of the fourteenth century, the faculties of medicine and arts were added. The theological faculty was instituted some years later. This was the first school in Europe where dissections of the human body were practised, and anatomy publicly taught. It was within the walls of this institution that that form of electricity known as Galvanism was discovered by Galvani, one of its professors, and whose bust and monument now adorn one of its halls. It has also given a splendid example of justice and liberality in conferring its honors on all the truly meritorious, regardless of sex. Hence in the fourteenth century it permitted the celebrated Novella d'Andrea to occupy the chair of her father, the distinguished canonist, and after her Christina de Pisan filled a professor's chair, although her beauty was so great that a curtain was drawn before her, so that she might not distract the attention of the students,—"Lest if her charms were seen, the students should let their young eyes wander o'er her, and quite forget their jurisprudence." Still later Laura Bassi became professor of mathematics and natural philosophy. She was created doctor of laws, and many ladies of France and Germany, who were members of the university, attended her lectures. And what is still more worthy of note, at a more recent date still, Madonna Mazolino graduated in medicine and surgery, and was made professor of anatomy, and taught the science to thousands of young men, with great éclat; and within the present century Matilda Tambroni was made professor of the Greek language, and filled the chair with eminent ability. When we reflect upon such an illustrious example set by this world-renowned university, we may well blush at the illiberality of American colleges, who will not even admit females to share in the instructions they were founded to impart!

I am indebted to the present librarian, Liborivus Veggettus, the successor of the renowned polyglot Mezzofanti, for his kind civility in showing me through every department of the university, and giving me all needed information in regard to its present condition and prospects. At present the medical department is more flourishing than either of the others, and its professors rank among the very ablest men in Europe. Its reputation as a clinical school was a good deal owing to the labors of Tommasini, and although he has since removed to Parma his reputation has been well sustained by his successors. The number of students at present does not vary far from eight hundred. From all I have seen and heard I am satisfied that in no part of the world is every department of medical science more thoroughly taught than in this university. Certain I am that no institution can boast of richer and more extensive collections in every branch of medicine and natural history than this. I have seen most of the great anatomical and pathological museums of Europe, but I have seen none that for completeness, variety, rarity, and skilful preparation and careful and successful preservation, will compare with this.

The preparations, both natural and artificial, illustrating every branch of pathology, external and internal, and every department of anatomy, human and comparative, are quite unrivalled both in number and excellence, and the same may be said of obstetrical science and anatomy. There are, I should judge, a dozen or fifteen large rooms of the noble palace Cellesi, now forming part of the university building, filled with these preparations, all systematically arranged, and in perfect preservation. The collection of monstrosities, human and comparative, is quite unique, and serves to illustrate every variety of malformation and deformity hitherto described. There is an immense collection of calculi, illustrating every form of concretion both in man and the lower animals. Nor are the collections in natural history less complete. Mineralogy, geology, zoology, in every department, conchology, botany, etc., etc., all are illustrated by the most ample and perfect collections to be found on the continent. I was delighted also to see here the original herbarium of Ulisse Aldrovandi, and see the botanical drawings made and colored by his own hand, certainly no mean specimens of pictorial art; also to examine some of the two hundred folio volumes of scientific manuscripts which he left behind! I saw also old Avicenna and Dioscorides in Arabic manuscript, and a terrestrial globe six feet in diameter, made one hundred years ago by Petrus Rosini, a monk, in which all countries, seas, etc., were accurately delineated with the pen. In connexion with the university are several hospitals, a clinical hospital, a veterinary college, botanical garden, etc. The *Ospedale della Vita*, or *Ospedale Grande*, is the largest in the city, containing probably fifteen hundred beds. It is situated just on the borders of the city, at its southern suburbs, and is bordered on one side by extensive grounds and gardens, to which convalescent patients are admitted. The buildings are large, and surround a court in which are the usual fountains, etc. Though probably constructed for monastic purposes they are admirably adapted for hospital uses. The wards are very spacious, clean, and perfectly ventilated, and the same may be said of nearly all hospitals I have seen in Italy, as at Venice, Padua, Vicenza, Verona, Mantua, Reggio, etc. It is beautiful to see with what tenderness, assiduity, and skill the poor patients are treated, and we learn many useful lessons from these people, whom we are apt to regard as ignorant, superstitious, and bigotedly attached to all sorts of delusions and errors. I have never seen so much time spent by the visiting physicians in their daily rounds as in Italy, nor such intense devotion to their duties, nor such extreme cautions in forming a diagnosis, nor such carefulness in writing out prescriptions, nor such tenderness on the part of nurses. Were I to seek for a cause to explain all this, I should certainly not fail to find it in the cultivation of a deeper religious spirit, a more profound conscientiousness, a quicker sense of duty, a feeling of greater responsibility; and I shall leave Italy with a full conviction that in all that concerns humanity, benevolence, and charity, she stands in the van of nations, and deserves the plaudits of mankind. I observed some typhoid and typhus fever cases in the wards, but the house-physician remarked that the city was unusually healthy, and that they had fewer patients than usual at this season of the year. As to Italian practice it seems to me generally judicious and skilful. Some think they carry the depletory practice too far in some cases, and considering the kind of patients they chiefly have to treat in hospitals, viz. the poorer classes, who often suffer for want of sufficient food, there is probably some foundation for the opinion. The physicians of Italy, however, are well read and habitually studious; they are keen observers, and have logical, philosophical minds, and no one can believe they would pursue a course of practice which their own experience and observation show to be prejudicial. I believe the fact to be, that they deplete far less than is generally supposed. I know from examining the books in different Italian hospitals, that wine is habitually given to more than two-thirds of their patients.

I shall send you some communications on the medical institutions of Berlin, Vienna, Venice, etc., hereafter. At present you could not find room for them in your pages.

American Medical Times.

SATURDAY, MAY 9, 1863.

GRATUITOUS MEDICAL SERVICES TO LIFE INSURANCE COMPANIES.

The medical profession has the reputation, at least among its own members, of being greatly overworked and miserably underpaid. It is true, even of those services for which medical men are promptly and fully paid, that the physician receives a smaller compensation than any person who brings to the discharge of duties special knowledge; he ranks below many classes of artisans. But we must add the fact that much of the time his services are confessedly rendered gratuitously. All the poor are his patrons, and by far the most exacting patrons that he can claim. Their demands upon his time are constant, and their calls are always imperative. Finally, if there is a public institution which requires a medical attendant, this service must also be gratuitous, though the governors or commissioners who control its affairs receive large salaries. It is not our intention now to pass in review the instances of extortion practised upon our profession, but to notice one in particular where reform is needed, and which medical men should unite to obtain.

Life Assurance Societies are wealthy organizations which receive large incomes from their business. Many of these corporations have amassed immense wealth, and all are in a greater or less degree prosperous. These societies are actually dependent upon medical officers for protection and success. The medical examiner is indeed the most important officer in the organization, for the prosecution of the business calls for his daily examination of applicants. The success of the whole business of Life Assurance may be said to rest most unequivocally upon the professional knowledge of the medical examiners. No Life Insurance Society would for a moment employ a medical officer of recognised incompetency. On the contrary, every such association seeks out the best educated and most reputable physician for this office, and to his knowledge of the profession intrusts its future success.

Here is a marked instance in which the prominent medical men of any given community are placed in a position to command full and ample remuneration for their services. Their patrons are wealthy and powerful, and bestow large salaries on other important officers. The medical examiner ranks among the first in point of real consequence, and brings to the discharge of his duties a higher qualification than any other officer, viz. the knowledge of a scientific expert. Such services in every other department of business command respect and the most liberal reward. Why do they not in a Life Insurance Co.? There is but one reason, and that is apparent on the most superficial examination of the subject. It is this: Medical men do not place a proper estimate upon their own services.

There are found in this and every community physicians in large practice taking high rank in their profession, who are willing to travel several miles at mid-day to attend at the offices of Life Insurances, and, after making as critical medical examinations as would be required in most obscure diseases, they accept with gratitude the paltry fee of *three*, *two*, or even *one dollar* per head. Indeed, the passion for serving these great monopolies almost gratuitously, is so strong among our leading physicians, that they struggle for the vacancies which occur with all the desperation of politicians. Instead of rejecting with scorn the miserable pittance which these companies dole out to them in the way of fees, they pocket it with an air of the most intense satisfaction. We might forgive such greed in a young man who has to struggle hard to obtain a livelihood; but in older members, enjoying sufficient incomes from their legitimate business, it is reprehensible and unpardonable.

A great reform is needed in this matter. The profession should unite in requiring that every medical examiner in a Life Insurance Company shall demand an adequate payment for his services. Instead of three dollars for each examination let him require seven or ten dollars, or still better twelve, as in English companies. In this engagement he has the power of compulsion, for no Life Insurance Association will exchange a reputable physician for one of even doubtful character. There can then be no reasonable excuse for this humiliation of the profession at the hands of the older members.

There is, however, still another method in which the profession are induced to serve these wealthy corporations, and in this instance they render their services gratuitously. To insure itself against all possible risks the Association requires the applicant to obtain from his regular medical attendant a lengthy certificate as to his predisposition to disease, etc., etc. This certificate is generally made out by the physician as a favor to his patient, when in reality it is a gratuitous service rendered to the Insuring company. They require it as an additional safeguard. The physician acts the part of a consultant, and receives nothing for his trouble and information. View this act in whatever light we may it can but be regarded as a gross imposition upon the profession, and should be resolutely resisted. The medical attendant of the applicant is entitled to his fee as a consulting physician, and should demand it without reserve. In this case, also, he has the power to demand that justice be done him, and to compel the performance of the act. His information is absolutely essential to the complete medical examination of the applicant, and the Society will not proceed without it.

The duty of the profession seems to us apparent. By concert of action individual members engaged in Life Insurance Companies should demand an adequate remuneration for their services. The question is not whether A or B can afford to leave his business, and attend at the office of the Company an hour or two daily for three or five dollars. It is rather a question which concerns the honor and dignity of the whole profession, and which no individual has the right to settle according to his own necessities. In this matter he is bound to consult the interests of his calling, and this calling demands of every member that he sustain in his own person its claims as an exalted scientific pursuit. It is equally clear that every physician should positively refuse to make out a certificate for insurance for his patient unless he is paid by the Company a full consultation fee. By declining this gratuitous service he does no violence to his relations with his patient, and will demand only what is just and right. If the profession will unite, these most desirable objects can readily be obtained.

THE WEEK.

WASHINGTON CITY, the National Capital, is undoubtedly in the most insanitary condition of any city in the United States. The principal sources of uncleanliness are thus given by DR. HENRY G. CLARK, of the Sanitary Commission, in a letter to the military authorities, recommending the adoption of appropriate measures:—

> "1st. The accumulation of large numbers of men and animals in confined locations. 2d. The accumulations of filth, such as vegetable and animal offal, consequent on the above. 3d. The entire neglect of cleansing operations in the yards, lanes, and streets of the city, especially the very deficient drainage. 4th. The nuisance of a shallow, and neglected, and filthy canal in the heart of the city, a receptacle of the sewers, and a place of deposit for dead horses, etc. 5th. The marshy and stagnant water in many vacant lots, some of them—as in North Capitol street—near large hospitals, the want of drainage of which has rendered many parts of the city, as that near the President's House, malarious spots, producing intermittent and remittent fevers, jaundice, etc. 6th. The accumulation of the sick in large numbers is a very powerful means, unless proper sanitary measures are taken, of intensifying all the ordinary and extraordinary causes of disease."

The recommendations of DR. CLARK embrace a rigid system of sanitary police, which the nation is interested in seeing enforced.

THE *Chicago Medical Examiner*, the Editor of which, PROF. DAVIS, is Chairman of the Committee of Arrangements of the American Medical Association, speaks most encouragingly of the prospects of a large gathering at the next meeting. It thus alludes to the efforts to discourage the meeting:—

> "Let no one, outside of Chicago, imagine that the course taken by the *Chicago Medical Journal*, and its senior editor, PROF. D. BRAINARD, in opposing the meeting of the Association, indicates any division of sentiment or action in the profession here, or that it represents the wishes or feelings of any one here but himself. On the contrary, the profession here are united, and earnestly preparing to give their brethren as cordial and pleasant a reception as they have met with in any other city in our country. Our hotels are of the best character, and amply sufficient to accommodate half a dozen 'Canal Conventions' and Medical Associations at the same time. We have full confidence that the coming annual meeting will be well attended; that its members will transact the legitimate business of the association with dignity, harmony, and profit; that they will revive and extend past associations and friendships, and by their liberality of sentiment, and their strict adherence to the proper objects of the association, they will set an example worthy of imitation by all other conventional organizations, whether religious, political, or scientific."

AN attempt was lately made on the life of a medical man in Italy, who had refused 500 *francs* which had been offered to him as a bribe to declare that a young conscript was unfit for military service. He was shot at by the friends of the conscript, severely wounded, and barely escaped with life.—*Brit. Med. Jour.*

DR. M'GOWAN, known as a Chinese and Japanese traveller, is about to proceed on a journey through the mountainous districts of China and Formosa.—*Brit. Med. Jour.*

Correspondence.

ON THE INTRODUCTION OF SPECIALTIES INTO BELLEVUE HOSPITAL.

[To the Editor of the American Medical Times.]

Sir—The 20th of April, 1863, may prove to have been an important day in the medical history of our Public Institution. On that day the Commissioners of Charities and Correction, desiring to do their duty in advancing all proper means to place the poor who are obliged to seek refuge in the hospitals under their charge upon the best footing consistent with their condition, and make available all the developments under the advance and progress of medical science, took into consideration the subject of enlarging the facilities at Bellevue Hospital for the benefit of the poor of this city, for the treatment of specialties, and "in order to elicit all information in respect thereto," they addressed a letter of inquiry to the Medical Board. What answer will be given?

There was a time when all science, physical and metaphysical, could be grasped by one master-mind. While human knowledge was yet limited to but a small number of principles and facts, a few elect, like a Hippocrates or an Aristotle, could sway at the same time the sceptres of Medicine and Natural Science. But as knowledge more and more accumulated, division and subdivision became necessary. Thus medicine separated *as a specialty* from its fountain-head and co-ordinate streams, the physical sciences. Thus physicians were impelled to devote themselves to special departments of medical study or practice exclusively, until to-day each branching path of the vast domain is found to lead to a mine of inexhaustible research, in which one human lifetime is but a short working hour of the delver, and it is no longer permitted even to a Humboldt or a Virchow to embrace all the immense details of our science and art.* To preserve the natural unity of the subject, to accommodate the general wants of variously constituted communities, the bulk of the profession must perhaps ever remain "general practitioners," but no one can hope to obtain preeminence in any one branch without bestowing upon that branch special attention; and even the most arduous and toilsome worker must be content to contribute a few building blocks, or it may be but a single stonelet, to the grand temple for the healing of the afflicted which holds the common altar of all physicians, specialists and general practitioners. Specialism is not without dangers. The specialist must preliminarily be a regularly educated man; other things being equal, the best general practitioner, of course, becomes the best specialist. Division may on the one hand be carried into absurd extremes, and on the other not correspond to the actual advancement of our art. But the advantages of specialism to the patient and to science far overbalance its real and presumed injurious effects. It is well known, too, that the profession of this country has long looked with suspicion and disfavor upon the name "specialty," and the character of a "specialist." The origin of the prejudice is also well known; nor was it unreasonable or unjustifiable to associate the idea of quacksalver and knave with that of specialist, as long as no regularly educated honorable member of the profession took the title; as long as ignorant and unprincipled impostors monopolized the reputable name with a disreputable game at the expense of the health and pockets of the credulous portion of the community. But, happily, that time is past. Though pretenders abound to usurp all titles, that of specialist is proudly borne by many honorable men, men of genius and enlarged medical knowledge. Verily the day of professional progressive specialty is coming,—nay, has already come. The step taken by the Commissioners of Charities and Correction is therefore a liberal and important one. May the improvement it inaugurates soon be realized for the benefit of the sick, and the advancement of science. The medical staff of Bellevue Hospital, and indeed the whole profession, will doubtless heartily co-operate in the praiseworthy endeavors of the Commissioners; and whatever be the precise expression of individual views and opinions in the answer of the Board, its spirit and general import may, I think, safely be predicted!

But the Commissioners, after mentioning eye, ear, nervous and skin diseases, request a reply also to the following interrogatory:

2. Are there other diseases *and Specialties* that should be regarded as important to *treat by themselves* under similar provision?

Throat Diseases, *especially affections of the larynx*, should, in answer, be prominently brought forward to the Board. The frequency of their occurrence; their leading to the most serious consequences in many, and to considerable inconvenience in all cases, either terminating fatally, and often with much rapidity, or entailing difficulties of the voice, the respiration, and deglutition; the fact that the use of the laryngoscope for their recognition and treatment has recently revolutionized our knowledge of them, having transferred them from the category of *internal* and obscure to that of *external* diseases within our reach, and the little attention given thereto as yet by the profession at large; render them peculiarly suitable for such separate treatment. There is perhaps no class of patients to which even the most accomplished physicians do less justice than to the sufferers from laryngeal affections. Of this there is ample evidence afforded me at the *Clinic*, which the liberality of the Faculty of the University Medical College has enabled me to establish, and, as far as I have been informed, indeed, the experience of Bellevue Hospital proves the same thing.

I conclude with the words of the illustrious Berlin and Utrecht Professors (Virchow and Donders), "To specialists must we look for further advancement of the healing art!"—"Specialties nowadays are the essential conditions of the progress in science. * * * * Whoever speaks of progress in medicine to-day, must needs speak of specialties!"

Louis Elsberg, M.D., F.A.M.,
Lecturer on the Diseases of the Larynx and Throat at the University.

153 West 15th street.

SOLDIERS' RELIEF BILL.

[To the Editor of the American Medical Times.]

Sir:—The Bill published by you in the Times of the 28th March, purporting to be the Army Relief Bill presented to the Legislature of the State of New York, was *never presented* to them, and was a *gross fraud*, being a rough sketch which was presented to the Governor for his approval or disapproval, most of which related to the duties of the medical agents, and was not intended as an integral part of the bill. In this imperfect condition it was sent to Surgeon-General Hammond without our knowledge, and thence was transferred to your columns.

Yours, etc.,
John Swinburne, M.D.

Albany, May 1, 1863.

FOREIGN MEDICAL INTELLIGENCE.

PARIS.

The subjects of *les eaux potables* and *le secret medical à-propos de mariage* continue to fill the columns of the Paris press, and engage most of the learned societies in long discussions. The former is of course of little consequence to us, for no two rivers on the globe differ so greatly as do the Croton and the Seine, and, therefore, whatever obnoxious principles they find in their waters need not give us any concern. But *le secret medical* is of a very different nature, and demands our debates as well as theirs. The subject presents so many phases that it is difficult to know how to introduce it, unless by relating the following episode which happened in Montpellier some few months ago.

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* Niemand ist im Stande, das ungeheure Detail unserer Wissenschaft ganz zu übersehen."—Virchow.

M. Delpech, a professor of eminence, having heard that the daughter of a dear friend was about to marry a young man who he knew had but one testicle, resolved for her sake (?) to make it known. Thereupon he informed the lady's father, who at once ruptured engagements, and forbade the gentleman to pay further addresses to his daughter. Thus disappointed the thwarted lover studied now but to revenge himself on the despoiler of his hopes, and shortly afterwards M. Delpech was found assassinated in his carriage together with his coachman, and the murderer not far distant fell by his own hand already so bloody.

Such, in brief, is the sad incident which has caused so much commotion, and set to writing and debating numerous medical philosophers, besides many others never before heard from. The text is: "What should be the conduct of a physician consulted upon the health of one of his clients *à l'occasion d'un mariage.*" The gravity of this question must strike every one, and even some with alarm. We all have relations, either daughters or sisters, near and dear to us, and how important therefore to reflect on what course should be pursued to protect them against unclean and damaging advances. As their guardians we are ever ready to resent what openly assails them; consequently does it not behove us even more to preserve them from husbands whose veins are syphilized, or whose degenerate bodies but hand down miseries to others? The case of M. Delpech was an exteme one, and although prolific of so much benefit by drawing debate upon the subject of medical secrets, the instance will probably deter many from passing judgment on men's unfitness for matrimony. Delpech, though, did not become a martyr on a good occasion, for, as a *monorchide* simply, the client informed upon was not diseased and no unworthy candidate for marriage, which point palliates in some slight degree the infliction of so dreadful a revenge. The opinions of the savans upon the text are at great variance: one party says, preserve the secret, while another says, preserve pure blood. The doctor is priest, say some, and like him is sustained by all holy and common laws in holding inviolate any and all knowledge of his patients' infirmities: *Non facienda mala ut inde eveniant bona.*

The doctor is at liberty, say others, and even morally obligated, to impart his secret knowledge when called upon as in a question of marriage. In this dilemma the Hippocratic oath is brought forward, which, strange to say, was found to give support to both sides. The Scriptures, it is true, admit of many versions, and thus comfort and oblige mankind, but who has heard that the Hippocratic oath can be turned to accommodate two sets of differing doctors? To prevent any doubt on this point here follow the two renderings:

"Admitted to the interior of families I swear that my eyes will not see that which passes, and that my tongue will not impart the secrets in me confided."

"The things which I may see or may hear said in the exercise of my art, or outside of such functions in my intercourse with men, *and which should not be divulged*, I will hold silent, and regard them as inviolable secrets."

The foregoing is almost literal from the French, and as the present writer has not at hand the oath in its original text he is not qualified to decide which version is right, or if *toutes les deux* are wrong. In conclusion, this is about as far as the Parisians have got, and, to use a political phrase, as there are no signs of immediate settlement intervention would doubtless be acceptable. Tell us, then, ye sages, "What is to be done with the secret?" CYGNET.

ILLINOIS STATE MEDICAL SOCIETY.—The regular annual meeting of the State Society is to be held in Jacksonville, on the first Tuesday in May.

Army Medical Intelligence.

MEDICAL REGULATIONS DURING BATTLE.

SURGEON-GENERAL'S OFFICE,
WASHINGTON, D. C., March 25, 1863.

IN order that the wounded may receive prompt and skilful attention during and immediately after a battle, the following instructions, compiled in part from a circular issued by the Chief Medical Director of the Army of the Potomac, October 30, 1862, are published for the information and guidance of medical officers:

1. Before a battle, the Chief Medical Director, and the Medical Directors of Army Corps, will consult and cooperate with the officers of the Quartermaster's Department in making the necessary arrangements for the transportation of the wounded, and in instructing the drivers and assistants in the service of the ambulances and litters.

2. The Chief Medical Director will have the general superintendence of the whole ambulance and hospital service, and will give such orders for the removal, accommodation, and surgical treatment of the wounded as may be necessary. After a battle, he will cause the wounded to be removed to the permanent general hospitals, as soon as it is proper to do so, and no wounded man will be sent away from a field hospital without his authority.

3. As soon as practicable after a battle, the Chief Medical Director will transmit to the Surgeon-General a report of the action, describing the nature of the battle, the numbers engaged, the character and range of the enemy's fire, and the period and mode of removal of the wounded. He will state the number and location of the division hospitals, their organization and supplies, and also whether the wounded were promptly provided with food and blankets. He will transmit with this report a consolidated tabular statement of wounds received and operations performed. (See tabular statements, monthly report of sick and wounded.) Should deaths occur from anæsthetics, they will be reported in detail.

4. Medical Directors of army corps will apply to their commanders, on the eve of a battle, for the necessary guards, and men for fatigue duty. These guards will be particularly careful that no stragglers be allowed about the field hospitals, using the food and comforts prepared for the wounded.

5. Previous to an engagement, each Medical Director of an army corps will detail a proper number of medical officers to remain and take care of the wounded, should a retreat be necessary. This detail he will request the corps commanders to announce in orders.

6. Medical Directors of army corps, acting under the orders of the Chief Medical Director, will exercise a general superintendence over, and direction of, the medical service of their respective corps. They will establish division field hospitals in the most convenient and secure positions, with ready access to water and fuel, and in buildings, where suitable ones can be obtained.

7. Medical Directors of corps will see that the division hospitals are properly organized and provided with the necessary medicines, instruments, stores, and furniture.

8. They will see that the ambulances which follow the troops to succor the wounded and remove them from the field, have the necessary attendants, litters, and litter bearers, so that soldiers may have no excuse to leave the ranks for that object.

9. The Surgeon-in-Chief of each division will exercise general supervision, under the Medical Director of the corps, over the medical service in his division. He will see that the officers and attendants are faithful and efficient in the discharge of their duties in the hospital, and upon the field, and that the wounded are removed from the field carefully, and with despatch.

10. He will organize the division hospital as follows:

1st. A surgeon-in-charge; one assistant-surgeon to provide food, fuel, and water, and one assistant-surgeon to keep the records.

2d. Three medical officers, to constitute the operating staff of the hospital; three medical officers as assistants to each of these officers.

3d. Additional medical officers, hospital stewards, cooks and nurses of the division.

11. The surgeon-in-charge will have the general superintendence, and be responsible to the division surgeon for the administration of the hospital. It will be his duty to have the hospital tents properly pitched, and when houses are used, to have them put in proper order for the reception of wounded. He is to provide the necessary medical and hospital supplies, operating tables, straw or hay for bedding, blankets, and rations.

12. The assistant-surgeons, who are under the immediate orders of the surgeon-in-charge, will aid that officer in preparing the hospital for the reception of the wounded. That duty performed, one assistant surgeon will organize and take charge of a kitchen, using for this purpose the hospital mess chests, and the kettles, tins, etc., in the ambulances. The supplies of beef-extract and bread in the ambulances, and of extract of coffee, tea, condensed milk, and other hospital stores in the hospital supply wagons, will enable him to prepare quickly a sufficient quantity of palatable and nourishing food to meet the demands, until fresh beef and other subsistence stores can be provided. All the cooks, and such of the hospital stewards and nurses as may be necessary, will be placed under the orders of this assistant-surgeon.

13. The other assistant-surgeon will keep a complete record of every case brought to the hospital, giving the name, rank, company, and regiment; the seat and character of injury; the treatment; the operation, if any performed; the name of the operator, and the result. This record will be transmitted by the division surgeon to the Medical Director of the corps, and by him sent to the Chief Medical Director.

14. This assistant-surgeon will make out two "Tabular statements of wounded," one of which the division surgeon will transmit, within forty-eight hours after a battle, to the Chief Medical Director, and the other to the Medical Director of the corps.

15. He will also see to the proper interment of those who die, and that each grave is marked with a headboard, with the name, rank, company, and regiment legibly inscribed upon it.

16. The three medical officers composing the operating staff will be selected by the division surgeon, without regard to rank, but solely on account of their known prudence, judgment, and skill. The immediate responsibility of the performance of all important operations will rest with them. In all doubtful cases they will consult together, and a majority of them shall decide upon the expediency and character of the operation.

17. Each of these officers will have the aid of three medical officers, who, acting under his orders, will assist him in his operations.

18. The remaining medical officers of the division, except one to each regiment, will be ordered to the hospitals to act as dressers and assistants generally. Those who follow the regiments to the field will establish themselves, each one at a temporary depot, at such a distance or situation in the rear of his regiment as will insure safety to the wounded, where they will give such aid as is immediately required; and they are here reminded that, whilst no personal consideration should interfere with their duty to the wounded, the grave responsibilities resting upon them render any unnecessary exposure improper.

19. The division surgeon will order to the hospital, as soon as it is located, all the hospital supply wagons, hospital tents and furniture, and all the hospital stewards, cooks, and nurses belonging to the division. He will notify the officer commanding the division ambulances of the position of the hospital. When his duties permit, he will give his professional services at the hospital.

20. No medical officer will leave the position to which he has been assigned without permission; and any officer so doing is to be reported to the Medical Director of the corps, and to the Chief Medical Director.

21. Medical Directors of corps and division surgeons are required to have the following articles carried in the box of each ambulance, under the driver's seat:

Beef, extract, in 2-lb. tins,	lbs. 6.
Buckets, leather,	No. 1.
Kettles, camp,	No. 1.
Lantern and candle,	No. 1.
Spoons, table,	No. 6.
Tumblers, tin,	No. 6.
Hard bread,	lbs. 10.

The boxes will be kept locked. The surgeon-in-charge of the Brigade will keep the keys, and by weekly inspections ascertain that each ambulance has its full supply. In addition to the above, each ambulance is to be furnished with two litters, and one keg filled with water.

William A. Hammond,
Surgeon-General U. S. Army.

ORDERS, CHANGES, &c.

Assistant Surgeon W. H. Bidluck, 62d New York Vols., having been tried before a General Court-Martial, on the charge of "positive and wilful disobedience of orders," has been "cashiered, with loss of all pay and allowances that are or may become due him from the United States."

So much of Special Orders 119, current series, as dismissed Surgeon J. G. Buchanan, 32d Ohio Vols., has been revoked, he having been previously discharged by resignation under Special Orders No. 33, January 17, 1863, Headquarters Department of the Ohio.

Surgeon John Moore, U.S.A., has been relieved from duty in the Army of the Potomac, and ordered to report in person without delay to Major-General Grant, commanding Department of the Tennessee, to relieve Surgeon M. Mills, U.S.A., in the duties of Medical Director of that Department. Surgeon Mills to await orders to come before the Retiring Board, at St. Louis, Mo.

The resignations of Surgeon J. B. Peale, U.S.V., and Assistant Surgeon J. H. Pooley, U.S.A., have been accepted by the President.

Assistant Surgeons C. T. Alexander and B. A. Clements, U.S.A., have been promoted to Surgeons.

Drs. James Bradley, of Philadelphia, H. T. Legler, of New York, and J. H. Currey, of Maryland, have been appointed Assistant Surgeons of Volunteers, to date from March 27, 1863.

Surgeon W. H. Church, U.S.V., has been assigned to duty as Medical Director, Department of the Ohio.

Surgeon W. W. Holmes, U.S.V., has been assigned to duty as Medical Director, District of Ohio.

Surgeon J. C. Whitehill, U.S.V., has returned from leave of absence, and resumed his duties as Medical Director, at Jackson, Tenn.

Surgeon G. L. Sutton, U.S.V., has relieved Surgeon N. R. Mosely, U.S.V., as Medical Director Abercrombie's Division, Arlington, Va

Surgeon N. R. Mosely has relieved Surgeon G. L. Sutton, U.S.V., in charge of Emory Hospital, Washington, D.C.

So much of Special Orders No. 154, current series, as dismissed Assistant Surgeon J. J. Ellis, 37th Massachusetts Vols., on the report of Colonel O. Edwards, of the same regiment, has been revoked, Assistant Surgeon Ellis having been honorably discharged by Special Orders 67 Headquarters 16th Army Corps, March 10, 1863.

The following assignments of Medical Officers have been made:

Surgeon John E. McDonald, U.S.V., to report by letter for duty to Major-General Burnside, commanding Department of the Ohio.

Surgeons C. N. Chamberlain and H. Janes, U.S.V., to report to the Medical Director, Army of the Potomac.

Surgeons C. W. Hornor and R. R. Taylor, U.S.V., both on duty in Philadelphia, Pa., Surgeon Peter Cleary, U.S.V., now on duty at Camp Parole, Annapolis, Md., Assistant Surgeon C. S. Frink, U.S.V., now on duty at Camp Convalescent, near Alexandria, Va., Surgeon J. W. Faye, U.S.V., and Assistant Surgeon E. J. Darken, U.S.A., to report in person to Major-General Rosecrans, commanding Department of the Cumberland, and by letter to Assistant Surgeon-General R. C. Wood, at St. Louis, Mo.

Assistant Surgeon J. T. Calhoun, U.S.A., to report for duty to Surgeon Jonathan Letterman, Medical Director, Army of the Potomac.

Assistant Surgeon L. D. Harlow, U.S.V., has been assigned to duty at Hospital No. 3, Nashville, Tenn.

Assistant Surgeon J. W. Lawton, U.S.V., has been assigned to duty at Madison, Ind.

Surgeon J. S. Bobbs, U.S V., has returned to Indianapolis, Ind., and resumed charge of the General Hospitals at that place.

Surgeon John Neil, U.S.V., has been ordered to report for temporary duty to the Medical Director, Army of the Potomac.

Surgeon R. C. Stiles, U.S.V., has been assigned to the 2d Corps, Army of the Potomac.

Assistant Surgeon A. M. Wilder, U.S.V., has been assigned to duty at Madison, Ind.

Surgeon B. Darrach, U.S.V., is in New York on leave of absence (sick).

Surgeon A. M. Clark, U.S.A., has been assigned to the charge of the 5th Corps Hospital, Army of the Potomac.

Original Lectures.

DISEASES OF THE RESPIRATORY ORGANS IN CHILDREN.

BEING A COURSE OF LECTURES PREPARED FOR DELIVERY DURING THE SPRING SESSION OF 1862 IN THE COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.

BY THE LATE
C. VAN ALEN ANDERSON, M.D.,
PHYSICIAN TO CHILDREN'S DEPARTMENT, DEMILT DISPENSARY, N. Y.

PART I.

PRELIMINARY REMARKS.—ATELECTASIS.

In studying the diseases of the infantile respiratory apparatus, it is necessary that we should call to mind the peculiarities of structure and constitution of the child immediately after birth, and during the first years of extra-uterine life. We shall find ourselves observing the system in a state of active development, every part growing, every part strengthening its function by continual exercise. New stimuli are constantly applied. Unused organs are called upon not only to supply their hitherto untried powers to the nourishment of the animated being, but to harmonize with others, as recently created, and as strangely circumstanced as themselves. The complex machine which has been formed atom by atom, part by part, in darkness and seclusion, is suddenly put in motion by the great hand of nature, and required to perfect its own structure by its own processes of increase and decay. Probably there is no creature in the world more comfortable than a fœtus in utero at the conclusion of his nine months of preliminary existence. His organs are formed and prepared for his entrance into the outside world; his alimentary canal is in good working order; his muscular system has acquired sufficient strength for the automatic movements of his limbs; his lungs are carefully packed away in his thorax, ready to respond to the influence of the air; and he is surrounded and protected by soft membranes and a bland fluid of an equable temperature.

That the change from this condition to that one which is commonly known as "life" is anything but pleasant, he evidences by his cries at the moment of his birth. His unconscious repose, solitude, and darkness are rudely taken from him. He is pushed head-foremost into a world of unaccustomed light and unusual excitement. He exchanges his warm and bland fluid for a new and colder element, and his delicate skin experiences harder pressure and rougher usage than it has before known. His nourishment is henceforth to be accomplished by his own efforts; each sense is to be awakened and educated; his circulation takes a different course; and the function of respiration is now for the first time performed. The newly born child differs in many anatomical particulars from the adult. He is not yet a perfected being, but his development is to be continued during the important periods of childhood and youth; he is to adapt himself by constant change to the constant changes that go on about him. At birth the tissues, generally, are soft, and contain a large quantity of fluid; the skin is exceedingly sensitive, and forms in fact a portion of the respiratory apparatus; the glandular, lymphatic, and capillary systems predominate; there is very great nervous excitability, and as nutrition is to be carried on immediately the alimentary canal is more perfectly arranged than any other part of the body. The infant weighs about six pounds, and is eighteen or nineteen inches in length; the lower extremities are smaller in proportion than the upper ones; the head and abdomen are large; the thorax is prominent in front, flattened at the sides, and comparatively small. The mouth, though unfurnished with teeth, is admirably adapted for the procurement and conveyance of food; the stomach is a kind of elongated sac, its greater curvature not yet produced; the liver is large, and occupies about one-third of the abdominal cavity; the spleen is small; the lacteals as well as the pancreas, the kidneys, and supra-renal capsules, are well sized, and the mucous membrane of the intestine is villous, vascular, and readily irritated by the introduction of improper food. The special senses of sight and hearing are dull and imperfect, the movements of the limbs are automatic, and the reflex nervous system is in especial activity. But that which concerns us most at present is the condition of the organs which carry on aeration of the blood. Before birth they have not, of course, been exercised, as the circulation of the placenta performed their office; when, however, the infant is separated from the mother they are called into immediate play. A very beautiful explanation of the manner in which this is done has been offered by Dr. Ramsbotham: "Dissection teaches us that the cutaneous nerves communicate most freely with each other, and that a large extent of skin is supplied from the same source as the diaphragm, the chief power employed in respiration. The *phrenic*, or *internal respiratory nerve*, is derived from the second, third, and fourth cervical; and large branches from the second and third supply the back part of the head, the jaw, neck, shoulders, arm, and the upper part of the back and chest. Thus, then, the diaphragm, and the integuments of the upper part of the body—parts remote in situation—are connected together by the direct sympathy of nervous communication; and it would be an inevitable consequence that any stimulation applied to the extremities of one set of branches supplying the skin, would be propagated to the other branches of the same nerve ramifying on the diaphragm. The consequence of that stimulation would be the contraction of that muscle; by that contraction its convexity towards the thorax would be destroyed; it would be drawn into the form of an inclined plane, the capacity of the chest would be increased, and the external air would rush through the trachea into the pulmonary cells to fill the void thus created." The sensitiveness of the infant's nervous system is therefore its safeguard. The stimulus of the colder atmosphere into which it is ushered encountering the delicate filaments of the cutaneous nerves provokes the first, long, deep inspiration which is required to expand its lungs. Respiration is, however, very imperfectly performed for some time after birth. The lungs have been packed closely away in the thorax ever since their production, and the pulmonary vesicles do not at once acquire their full expansion. The softness and delicacy of the skin, and the completeness of the capillary system, still compensate to a very great extent for the deficiency of the pulmonary circulation. But gradually as the child breathes more and more, and takes, in sucking and in crying, deeper and deeper respirations, the pulmonary tissue gives way, and finally fills up its appointed portion of the thoracic cavity. Yet all the peculiarities of the respiratory apparatus are not confined to the lungs.

The nose is small, and the nostrils do not afford as free a passage for the air as they subsequently do. At the same time the nose is an organ of extreme importance to the infant, for, during the child's application to the mother's breast, the air passes entirely through the nasal passages to the lungs while the mouth is employed in suction. The larynx is also deficient in size during the first six or eight months, and does not increase markedly until the child begins to talk. The ribs, though the most of all the bones —with the exception of those of the skull—advanced in ossification, are soft, yielding, and elastic, while the intercostal and other muscles of respiration are feeble and meagre. The respiratory apparatus during infancy and childhood has, as it were, double work to do: it has to grow itself during the advancing periods of juvenile life, and it has to respond to the calls made upon it by the rapid circulation in all parts of the body; for the organs of vegetative life have not only to provide for the daily waste of the daily renovation, but also for the daily increase. The blood, therefore, flows with greater celerity, and requires more frequent vivification than in the adult. Calling the average frequency of the pulse in the grown person seventy-five in a minute, and his respiration twelve, we shall find in the child of a week old that the former is 102 and the latter thirty-nine. The rapid breathing of the infant is not performed in the same manner as in later life. If you recall what has been told you, you will remember that in older persons the motion of the thoracic walls and of the diaphragm are the means by which the air is drawn into and expelled from the chest. While the diaphragm descends in inspiration the scaleni muscles contract and fix the first rib, and then the intercostals, acting upon the rest, draw them upwards and rotate their extremities outwards. When the chest is so expanded by the motion of the diaphragm and the ribs, the air enters through the larynx and trachea, and dilates the lungs. In this performance, however, more is done than the mere expansion of the chest. A considerable amount of muscular force is required for this simple operation, on account of the resistance afforded by the elastic nature of the walls of the chest themselves; and when this is overcome we have still to conquer the opposition of the yellow elastic tissue which permeates every portion of the lungs, contracting upon the bronchial tubes and air vesicles. Independently, however, of this last resisting force contained in the pulmonary tissue, at each ordinary inspiration we exert a muscular force equivalent to raising a hundred pounds. Now, you will perceive that in the tender, delicate infant this power does not exist. The resistance is proportionally the same in the child as in the grown person, but the muscles which are to overcome it have not acquired the same volume and consistency and hardness. Its breathing, therefore, is almost difficult; it is quick and short, hurried and shallow in its character, interrupted every few seconds by a pause as if for rest; while the slightest excitement or most minute disturbance will quicken it by ten or twelve inspirations in the minute. The child does not exhale as much carbonic acid as the adult, and it has even been observed that as the number of respirations increases the quantity of the gas in each diminishes, presenting a proof of the feebleness and uncertainty of the infantile vital processes. The manner of this breathing, too, is peculiar in another respect: it is performed almost altogether by the abdomen, the thorax expanding very slightly during the first few months of life. "The inspiration is affected almost entirely by the diaphragm, which being highly arched in expiration becomes flatter as it contracts, and descending presses on the abdominal viscera, and pushes forward the front walls of the abdomen. The movement of the abdominal walls being here more manifest than that of any other part, it is usual to call this the *abdominal mode* or *type* of respiration." (Kirke's and Paget's Phys.) If you put your ear to the chest of very young children, you will consequently hear little of that clear, loud sound which is known as puerile respiration; but as the child increases in age, and its muscular system in strength, the abdominal respiration disappears, is replaced by the thoracic, the lungs expand, and the auscultatory sounds become distinct. You will, therefore, observe, gentlemen, that the peculiarities of the infantile respiration are these:—1st. That the lungs at the period of birth are, for the first time, called into action, and do not at once and in all parts assume their full expansion. Also, that the first inspiration is caused by the stimulus of cold applied to the extremities of the cutaneous nerves, and through the reflex system inducing contraction of the diaphragm. 2d. That the mechanical portion of the respiratory apparatus is feeble, that the muscles are weak and undeveloped, and that the ribs on which they act are soft and yielding, not affording the same opportunity for firm traction that they do in after life. 3d. That, in consequence of this imperfection of the bony and muscular elements of the thorax, inspiration and expiration in very young children are chiefly performed by the contraction and relaxation of the diaphragm; that their breathing is, in fact, abdominal, but that as the child grows older the respiration changes its type, and becomes thoracic. 4th. That in consequence of the defective dilatation of the chest auscultatory sounds are fainter at the time of birth than they afterwards become; for they increase in tone and clearness with age, until they assume that state known as "puerile respiration." 5th. That the respiration of the young infant is hurried, shallow, difficult, and accelerated not only by disease but by slight excitements.—I have given you a brief view of the normal condition of the organs by which the blood is renovated in childhood. This much was necessary for the proper understanding of the subject which we are studying; for, if we are not familiar with a given part in health, we are unable to understand the changes and transformations wrought in it by disease. To be acquainted with morbid structures we must know their opposites; it is impossible for us to become good pathologists without previously being good anatomists and physiologists. This fact will, I think, be brought especially to your notice in entering upon the consideration of the state of the lungs to which I am about to ask your attention. It is one in which certain post-mortem appearances were long considered as the result of disease, until a happy inquiry into the physiology of the lungs showed that these appearances were simply the result of the non-fulfilment of their duties by the pulmonary tubes and vesicles. Physicians were formerly much puzzled by observing in the lungs of children who died soon after birth, lesions which seemed to indicate the possibility of pneumonia affecting the fœtus, but at the same time leaving behind it phenomena entirely different from those caused by the same disease in the adult. It received the name of *lobular pneumonia*, as pointing to its characteristic peculiarity; the malady seemed to be confined to single lobules, which were found of a dark color, dense, non-crepitant, sinking readily in water, and when cut not displaying that oozing of frothy serum which comes from the freshly divided surface of a healthy lung. These portions felt rather harder than other parts, and were not as easily torn. If an incision were made through them, they closely resembled in their compactness and solidity muscular tissue, and they were therefore said to be *carnified*. These lobules were strictly defined and mapped by their respective boundaries; there was a sharp line where the diseased line terminated abruptly, and met the healthy pulmonary structure; while they were depressed, giving to the surface of the lung an uneven feel. It was therefore manifest that the supposed inflammation did not spread by continuity, for there was no gradual shading off from the darker to the lighter parts, but, on the contrary, the deep violet hue was spread evenly over the whole lobule, and contrasted strongly with the unaltered lung substance around it. Much perplexity was excited by such phenomena as these, especially as it was discovered that they were not in all cases congenital, that this condition might be acquired after birth, and that the ordinary treatment for pneumonia was not adapted to cure it, but rather to hasten the fatal result. It was reserved for a German physician to give the true explanation, which he did in 1832. He had the temerity not to believe all that was in the books: he was bold enough to use his own senses. Instead of wondering, scalpel in hand, how in the world the fœtus got pneumonia, and why it was confined to lobules, and was not lobar, he had the audacity to try an experiment which nobody had thought of before him. Gentlemen, he inflated the lungs, and in one breath expanded the violet colored patches, and blew away all received theories of lobular pneumonia. Dr. Jörg gave the first precise account of this fœtal condition of the lungs, showing plainly that what had before been regarded as inter-uterine disease was in fact no disease at all, but really a failure to establish respiration, leaving portions of the pulmonary tissue in an undilated state. You will easily perceive that the smallness of the power in the muscular system in young children affords an easy explanation of the way in which this happens. You are aware that in the adult the pressure of the atmosphere upon the outside of the chest is balanced by the pressure of the air which is continually introduced into the interior; but when an infant draws its first breath it has to overcome not only the resistance of the thoracic walls, and the anatomical elements of the lungs, but in addition to all this it is forced to raise to some extent the weight of the atmosphere resting on the outside of its body. Now, the respiratory muscles are frequently not strong enough to do this. They are very little fellows in a feeble child—they have rather a poor foothold on the yielding ribs—and though they may and do pull hard, they are unable to move the enormous load as they should. The thorax is not expanded at all, no air enters the lungs, and the infant is still-born; or else respiration is only partially established, and the lungs remain in the condition known since the time of Dr. Jörg as *atelectasis*. This state of affairs is not, however, confined to newly born children; it may come on even in the adult in the course of other diseases. We may, therefore, properly enough make a distinction between the two, calling the first *atelectasis*, or the condition of those portions of the lungs which have never received any air at all into their vesicles, and are consequently unexpanded; and speaking of the second as *collapsed* lung, or that state which the pulmonary tissue assumes when having been once dilated by, it becomes completely emptied of the air.

Original Communications.

ON THE USES OF OPIUM,

IN MANAGING THE SHOCK AND REACTION OF SURGICAL INJURIES.

By EDMUND S. F. ARNOLD, M.D.,

OF YONKERS, N. Y.

When a serious injury occurs to any part of the body, calculated to destroy or materially to impair the vital functions of the part, the whole system sympathizes, and a general depression of the vital powers, proportionate to the seriousness of the mischief, takes place. The organic nervous system becomes temporarily paralysed, and with it all the vital functions dependent upon its healthy influence; the surface becomes pale and clammy, the circulation fails, nervous sensibility is destroyed, the whole system, in fact, is prostrated and relaxed, and the sufferer, if not in a state of actual syncope, is nevertheless frequently unconscious, as far as sensation is concerned, that any actual injury has befallen him. These symptoms, of greater or less duration, may be modified, increased, or prolonged, by mental shock or loss of blood.

Should the patient survive the first shock of the injury, after a while, either owing to the natural elasticity of the vital forces, or from restorative measures judiciously employed, returning circulation and sensibility indicate the commencement of reaction. The beat of the heart, at first weak and irregular, becomes more wild and tumultuous, meeting as it does with unwonted resistance in its attempt to propel the blood through the obstructed capillaries; the nervous sensibility becomes restored, and, gradually increasing, oversteps all healthy bounds, and with it the sufferer experiences a sense of stiffness and pain, soon amounting to agony, perhaps, in the injured part; and if all this goes on unchecked, an exalted action takes place proportionate to the extent of the previous depression, and local and general irritation and fever place the patient's life in more imminent jeopardy than at first. All equilibrium is destroyed, and the already shattered vital powers readily succumb.

I now come to the important question—How should this state of things be met? Can we lay down any fixed and simple plan of treatment, by acting on which present dangers may be overcome, and those ahead be averted? or must we of necessity follow developments and be controlled by a variety of circumstances requiring vast experience to enable us to weigh them correctly, or to guide us successfully through the often appalling difficulties to be encountered?

Were we, when the nose or ears of an individual are frozen, to take the sufferer into a warm room, and there await reaction before commencing our treatment, the reaction would probably be so sudden and violent that it would make headway calculated to cause destruction or at least permanent injury to the part before we could control it. Experience, on the other hand, has taught us to use friction with snow or ice-water until the vitality of the part is restored, thus keeping down by the cold any sudden reaction; while by friction return to the normal condition is brought about so gradually that it shall not run beyond healthy bounds, and the danger is soon overcome. This affords us the principle by which we ought to be guided when the whole system is stricken down by the shock of a sudden injury. During the continuance of this the whole nervous system is oppressed, and I think it should be laid down as a leading principle that, simultaneously with measures promotive of reaction, such oppression should be removed only by very slow degrees, and thus by allowing the system to gradually recover its natural elasticity, all danger may be frequently averted in a few days. This must be accomplished by a combination of stimulating and sedative influences, so balanced as on the one hand not to unduly hasten restoration, on the other not to risk utterly prostrating the as yet feeble vital forces. Such a combination I believe we possess in Opium.

So many apparently opposite qualities have been claimed for this drug that I may be pardoned for dwelling upon such of them as are applicable to my purpose. Opium, says Stillé, is a very complex substance containing both sedative and stimulant principles, the former residing mainly in the morphia, the latter probably in the thebaina of which it contains one per cent., and which, according to Magendie, is closely analogous to strychnia and brucia in its action upon the system. Codeia is also said to be a nervous stimulant, but this is not so well established.

Mr. Frederick Skey, of Bartholomew's Hospital, remarks that, while opium as a sedative is in daily requisition, its action is so associated with this that its occasional influence as a stimulant is almost lost sight of. Further on he says, that opium is a most valuable stimulant of the vital powers; that there is no drug, simple or composite, known to our pharmacologists that possesses an equal power with opium of giving energy to the capillary arteries, of promoting animal warmth, and thus maintaining an equable balance of the circulation throughout the body. We all know that when opium has been administered in small doses, and frequently repeated for any length of time, a hot skin and full pulse and a state of excitement bordering on delirium may be produced. How then is opium an antiphlogistic?

Here Mr. Skey again observes that its benefit, when administered for the purpose of arresting inflammatory action of the vessels, admits of much doubt; but he insists strongly on its inestimable value when resorted to immediately after an attack of inflammation has been subdued by local or general bleeding. Elliotson, Christison, and Watson, all extol it highly as an antiphlogistic in acute inflammatory disorders, but only after free bleeding; while Prof. Lever, of Guys, and others, affirm its value in restoring the system after prostrating uterine hæmorrhage. From all this we gather that opium does not really subdue inflammation. It must, where it exists, be subdued by other means, and the opium then exhibited as a preventive against its recurrence. In its virtue, then, as a preventive, not as a subduer of inflammation, lies the peculiar advantage of administering it freely immediately after the performance of any of the great operations of surgery, and keeping the patient under its influence until the danger of inflammation arising is past. It then both rouses the energies of the prostrated system, restores and controls the circulation, soothes pain, allays irritation, and thus places the patient in the best possible condition for recovery as well as for the exertion of the necessary separative processes. We may reasonably infer also, if opium acts so beneficially in restoring the energies and preventing subsequent inflammation when the system is prostrated by syncope from venesection or severe hæmorrhage, that it would do so equally in promoting healthy reaction after severe injuries, especially if the latter have been accompanied by hæmorrhage. I should further arrive at the conclusion that the foregoing shows a certain reduced and debilitated or exsanguine condition to be necessary for the safe administration of the drug in full doses, and that in proportion as reaction or inflammation have actually advanced we shall, bearing in mind its stimulant properties, need to be more careful of its dangerous effects being developed in the form of congestion or even narcotism.

The above conclusions presuppose the use of opium itself, and consequently of its stimulant and sedative properties combined. Of the latter I have not yet spoken. Repeated small doses, Elliotson says, create heat, thirst, and fever, whereas a considerable quantity produces the reverse; hence, if you want its sedative effects, it should be given in one full dose. This, he adds, would not be safe unless the patient were copiously depleted in the first instance, in other words until by the debilitated or exhausted or exsanguine condition of the patient, a toleration had been created for the remedy not afforded by the system when in a more vigorous state. Always bearing this in mind it seems then that we can produce either a stimulating or sedative effect according to the smaller or larger doses in which we employ it, the stimulating effect predominating where small doses are given; on the other hand, where a large dose is administered, we seem to step away over the stimulating stage, and produce an almost direct sedative action. *A priori*, with so powerful an agent one might suppose that with prostrated energies the system would be less able to resist its influence, and more readily succumb; whereas we find the reverse the case, and I do not know how it can be otherwise explained than by supposing that the narcotism arises from nervous exhaustion and congestion resulting from over-stimulation, and that the tolerance of the remedy is increased proportionally as the stimulation may be needed, and the system reduced to a condition removed from the dangers of congestion. In the case of a lady I attended during the cholera season of 1849, for dysentery, complicated with chronic disease of liver and lungs too, it was determined after consultation to try opium in large doses, and six grains were given every six hours for nearly three weeks, and until over four hundred grains were taken without producing a single unpleasant symptom; indeed it appeared to keep her in an artificially normal condition for the first fortnight, after which she gradually sank. There were no hopes entertained of the recovery from the first, and she was in an extremely exhausted condition when this treatment was commenced. I select the case of this poor broken-down creature in preference to others terminating more favorably, showing as it does, first, the reviving, and secondly the sustaining powers of opium; and I also think, from all the evidence I have thus far adduced as to its action, that if not placed in a position by itself as a compound substance in the Materia Medica, it nevertheless belongs rather to the class of nervous stimulants and tonics than among the narcotics, and that when we so regard it we take the first steps towards appreciating its great value in desperate surgical injuries, as well as the conditions under which we can safely employ it:

There is a class of cases where, perhaps, the pain is so great and overwhelming that the progress of reaction becomes, as it were, arrested, and what little of vital energy remains becomes quickly exhausted, and the patient will sink; or the case may otherwise terminate fatally from the irritative fever that sooner or later sets in. Here we can avail ourselves of the modifying influence of opium upon pain. If either by bloodletting, by the exhausting nature of the injury itself, or by the accompanying pain, the nervous energy has been reduced to a point at which a full tolerance of the drug is established, then taking the alleviation of pain as our guide, I believe it may be administered to any extent necessary to effect that object, with the effect not only of calming and soothing but also of preventing inflammation, and thereby contributing to the recovery of the patient.

In a case attended by Dr. Robert Nelson many years ago, in Canada, a gentleman had been wounded in a duel. The ball struck the posterior third of the crest of the right ilium, fractured that bone, and entered the body of the last lumbar vertebra, where it was found some eighteen years after. On the third night the agony of the patient was such as the Doctor had never before seen, nor since; the bedstead trembled with his body; he breathed and spoke through his teeth, and perspired so as to wet through a hair mattress. He exhorted for relief of any kind, even called for death. To this patient, at eight P.M., forty drops of tr. opium were given; at nine P.M., ʒ ij.; at three-quarters after nine P.M., ʒ iij; at half-past ten P.M., ℥ j.; at twelve P.M., ℥ ss.; and between three and four A.M., ℥ ss.; in all, ʒ xxiss.; when relief was obtained. I should add, he had been previously very freely bled. This large quantity of laudanum was taken with impunity and benefit. He subsequently took ℥ ss. doses two or three times in the twenty-four hours, producing and leaving behind no other symptoms than those of a moderate anodyne in ordinary cases of sickness, gradually improved, and recovered. In the above case, of which only a short abstract is here given, we have the conditions necessary to establish a full tolerance of opium, viz. a system reduced by copious bleeding, and shattered by the severe and exhausting pain of a terrible injury, involving both sensitive and ganglionic nerves. We find that it was necessary to repeat the opiate in full doses, in order to keep the pain subdued, and such will mostly be necessary; but instances will sometimes occur where the pain, being once effectually subdued by opium, will not return, although the lesion that caused it remains. Before the soothing effect of the drug has worn off the system appears to have become reconciled to the injury. May we not infer from such cases as the above, that when by shock, or hæmorrhage, or venesection, the necessary tolerance of opium has been established, that we may take the alleviation of pain as a safe guide for the extent to which it may be administered, giving it to any amount necessary to relieve pain, and no more—the cessation of the latter being evidence that the system has been thoroughly brought under its sedative influence?

(*To be Continued.*)

CASE OF EXSECTION OF SHOULDER-JOINT.

REMOVAL OF THREE INCHES OF SHAFT WITH EXCELLENT RESULT.

By JOHN WILSON, M.D.,

SURGEON U.S. VOLS.

James K. Clark, Co. F, 10th Pa. Res., æt. 20, was wounded at the battle of Fredericksburg, Dec. 13th, 1862. The ball (character unknown) entering about four inches below the acromion process of the right side, through the inner edge of the deltoid muscle, and passing upwards, comminuted a portion of the shaft and the head of the humerus badly. When admitted into hospital, the patient stated that several unsuccessful efforts had been made by surgeons on the field to discover and remove the ball; but no attempt had been made to save the limb.

After sufficient time had been allowed the man to recover from the exhaustion consequent upon his removal from the field-hospital in ambulance, the operation of exsection of the head and shattered portion of the shaft was determined upon. At this date, Jan. 6th, the arm was much swollen, a fetid and sanious discharge flowed freely from the wound; patient had considerable thirst, hot skin, coated tongue, and pulse of about 100. His previously good physique, however, as well as his cheerful fortitude under his suffering, indicated him a proper subject for the operation. He was accordingly on the above date placed upon the table, the ordinary anæsthesia produced, and a U-shaped incision made, embracing the deltoid, the inner arm of which was slightly modified, so as to take in its course the external wound. The flap was then dissected up, and the head of the bone turned out of the socket (care being taken not to cut the tendons of the biceps or coraco-brachialis), and the operation completed by removing with the chain saw about three inches of the upper portion of the shaft. Search was then made for the ball, when it was discovered that it had grazed the edge of the glenoid cavity without fracturing it, and had passed beneath the scapula beyond the reach of the ordinary means of extraction. The wound was closed with sutures, and the patient immediately removed to his bed. As soon as he had recovered from the influence of the anæsthetic, milk-punch was administered, and a generous diet prescribed throughout the subsequent treatment of the case. The local dressings consisted of simple water applications, with an occasional stimulating lotion when the granulations indicated any degree of indolent action. A watchful eye was kept over his power of assimilative digestion, and the measure of nourishment proportioned to its highest capacity, but never exceeded if possible. From the day of the operation until the wound was completely healed not a single untoward symptom was developed; neither pain nor other unpleasant sensation indicating the presence of the bullet, which undoubtedly yet remains buried up somewhere in the tissues beneath the scapula. On the first day of March the wound was completely healed, and the patient was able to dress and feed himself without inconvenience. He has now remarkably good use of the limb, being able to flex and extend the arm rapidly and freely, to place his hand upon his head or on the opposite shoulder, and indeed, with the exception of the direct action of the deltoid in elevating the arm (which is somewhat impaired) he can perform almost all the motions of a sound limb. The history of this case, we think, suggests several important considerations; one of which is, the propriety of not pursuing a leaden ball when it has passed beyond the reach of the ordinary means of extraction, unless its presence involves dangerous consequences, either immediate or remote, to the patient; another of which is, the importance of preserving, if possible, the tendons of the biceps and coraco-brachialis. This man was kept as short a time as possible under the influence of the anæsthetic, and came out of it nicely. Do we not in military surgery frequently keep our patients too long under the influence of this agent, and thereby greatly increase the risk of a speedy rally from the shock of the operation; especially in cases of secondary operations, where the vital energies are already so exhausted as often to make it a serious question whether to operate or not? We think we have seen the ill effects of prolonged anæsthesia under these circumstances more than once or twice. If an over-dose of opium or morphine, or an excess in alcoholic drinks, be frequently attended with great depression and disturbance of the vital force many hours after being taken, can we reasonably expect so potent an agent to be administered and continued long after the conscious soul has ceased to appreciate suffering, without serious subsequent disturbance ensuing? We think we should not, and should therefore make it a point not to protract the stage of anæsthesia beyond the most indispensably necessary time. We should, at least, do all our *pow-wowing* over our patient before we plunge him into the Lethean stream.

Carver U.S. Hospital, Washington, D.C.

Medical Department of Lind University.—The number of matriculants during the past term was 81, and the number of graduates 17.

Reports of Hospitals.

JARVIS U. S. ARMY GENERAL HOSPITAL.

I.—COMPOUND COMMINUTED FRACTURE OF THE THIGH. II.—COMPOUND COMMINUTED FRACTURE OF THE ARM. III.—OSTEO-SARCOMA OF SCAPULA.

By DEWITT C. PETERS, Ass. Surg., U.S.A.,
SURGEON IN CHARGE.

I.—*Compound Comminuted Fracture of the Thigh, caused by a Musket Ball.*—Private John E. Mock, aged 21 years, belonging to the 125th Regiment Penn. Vols., was wounded at the battle of Antietam, Sept. 17, 1862. The musket ball struck the outer side of the right thigh, passed on, fractured and comminuted the right femur, and finally lodged in the opposite nates, whence it was extracted some days subsequently by a pair of ball forceps. The fracture of the femur was at about the junction of the middle and upper thirds of the bone. The patient states that the amount of hæmorrhage was but small, and that the shock to his constitution was slight; he at first only experienced a sharp stinging pain in the right thigh. It was late in the day when he was wounded, and after the firing had slackened, and he was then so near the enemy's lines that he was not carried off the field that night, but was obliged to remain unattended close to the rebel pickets until the following morning. In proof of his condition he states he would have slept had not the cries of other wounded men troubled him. On being carried to the rear simple dressings were applied to the wounded thigh, and he was then sent in an ambulance to the General Hospital at Frederick city. The transportation on a rough road irritated the parts exceedingly, causing very active inflammation to supervene and threaten extensive sloughing. The surgeons in attendance, he says, at the General Hospital consulted on the propriety of amputating, but decided adversely, as they considered the time for a primary operation had already passed, and his chances therefore for life were better with the limb left as it was found. The suppuration that followed is described as being copious, yet laudable in color and consistency. It was nearly one month before the fracture could be adjusted, owing to inflammation and suppuration, and this was then accomplished by letting the limb rest in a long, straight, and grooved tin splint, which had previously been protected by cotton batting. The anterior surface of the limb was incased in plaster of Paris, which on becoming hardened answered as a coaptative splint extension, but no counter-extension was made, for the latter tended to interrupt free circulation, and cause loss of vitality in those parts located below where it could be made. The wound caused by the exit of the ball, as it passed out of the thigh, and also the one made by its lodgment (after its removal), healed kindly, and rendered no further annoyance. At the end of three months from the time when the injury was received, the tin splint and incasement were taken off, and it was found that the fragments had united firmly, and he was accordingly allowed to commence to move on crutches. The patient bears the scar of an extensive bed-sore over the locality of the sacrum, which he says occurred while he was confined to his bed, and he also further informs me that he suffered during this treatment with a severe attack of rubeola. He was transferred to this hospital March 7, 1863, and on examination it was found a fistulous opening existed in the locality of the external track of the ball, which on probing revealed the presence of necrosed bone. The callus appears unusually thick, and from its superabundance gives the thigh a slightly bowing appearance, more than in reality exists. By accurate measurement of the limb, and comparing it with the length of its fellow, it is ascertained that the shortening amounts to three and a half inches. Since his admission into this hospital the general health of the patient has improved rapidly, and he is now able to walk about freely unaided even by a cane. Two or three small pieces of bone have been removed as they became detached, and his case bids fair to be most happy in its results.

While our troops were marching on to take possession of Pensacola, Fla., I saw in consultation a soldier who was wounded in almost the same locality as was the above case. The femur was fractured and comminuted, while the vessels and nerves of any size escaped injury. Amputation was urged by two surgeons, but it was earnestly opposed by me on the ground that the man was in robust health, had youth in his favor, and near at hand we had a most excellent hospital. The trial was made to save the limb, and under the skilful attention of his regimental surgeon the man recovered with a useful limb in the course of four months' time. My experience in the treatment of compound fractures of the thigh caused by gunshot wounds, and by other kinds of violence, has inclined me (especially in certain of these cases) to favor the most conservative course of action. In cases where the large and important blood-vessels and nerves have escaped injury, and there is not any extensive laceration and destruction of the soft parts, when the constitutional symptoms are not alarming, the true indications are, it appears to me, to try and save the limb. Instances where by accident or by chance the surgeon has not seen the case in time to perform primary amputation, and has left nature to her own powerful efforts, which have been finally crowned with success, are not by any means unfrequent, and these instructive cases should not, in my judgment, be overlooked in forming our opinions in deciding whether a limb should be sacrificed or not.

II.—*Compound Comminuted Fracture of the Right Os Brachii, caused by a Musket Ball.*—Private George W. Krohn, aged 19 years, belonging to the 3d Wisconsin Regiment Volunteers, was transferred to this hospital March 7, 1863, from Frederick, Md.

The patient states he received his wound at the battle of Antietam, Sept. 17, 1862. A musket ball struck him on the inner surface of the right arm, about three inches below the shoulder-joint, very near the usual course of the brachial artery and vessels. The ball passed downwards and backwards, and made its exit posteriorly. In its transit it fractured and badly comminuted the os brachii of that side. In his own expressive language the soldier says "the arm dangled by his side like a whip-lash, after it was wounded." The hæmorrhage was very insignificant, and has not since occurred. From the battle-field the patient was sent with others to a General Hospital, where the surgeon in attendance placed the arm in a grooved tin splint, and applied soothing applications. The injury was followed by acute inflammation in the adjacent soft parts; pus formed and burrowed, requiring counter-openings to be made for its relief. In this manner he was subjected to treatment for a number of weeks until the suppuration ceased and the wounds closed, when the ordinary coaptation splints were applied. He states that his surgeon said the union of the fracture was slow. During the healing process several small fragments of comminuted bone came away. On his admission into this hospital it was found that the bones had firmly united, and the callus was extensive. The muscles of the arm were cemented together at the point of injury, and the motions of the limbs by this cause impeded. He was directed to use the shower-bath freely to the parts, and apply stimulating embrocations. Passive motion was also employed, and under this treatment he finally gained a useful arm, but being thus incapacitated from further military duty he has been discharged.

III.—*A Case of Osteo-Sarcoma involving the entire right Scapula.*—Private G. W. Trombough, aged 28 years, of the 107th Regiment Volunteers, states that in October, 1862, he began to feel pain and symptoms of irritation in the right shoulder. The pain was intermittent, and lancinating in character, and located in the region of the scapula. He was then on active duty in the field. In the course of a few days he noticed that the parts began to enlarge, and it was then that he presented himself to his regimental surgeon, who treated the case lightly, applied a blister on the tumor, and said the man would be all right in a day or so. Gradually since that time the tumor has gone on increasing in size, and is now quite formidable; it involves the entire scapula, and is to be detected filling the subscapular space as well as externally. The proportions of the tumor are regular, but they are more prominent in its lower section than above. The natural motions of the shoulder-joint are seriously interfered with, and this difficulty is slowly increasing. The adjacent glands of the axilla are not yet complicated, nor are there any discoverable symptoms of the inroads of the disease elsewhere. He states, however, he has been threatened several times with a superficial ulcer of the left lower lid near its inner canthus, which from his description I judge to be a predisposition to epithelial cancer. On the advent of the large swelling the predisposition to the latter has disappeared. The man stands five feet and nine inches in his stocking feet, weighs one hundred and seventy pounds, and is, with the exception of the tumor, in apparent robust health. He further states that his mother died while he was a child, with an extensive cancer of the right breast, and in my opinion he is now suffering from the same affection. Her disease was probably scirrhous, while he is taking on the encephaloid form. Acting on the theory of the tumor being malignant in nature the patient has been taking since his transfer into this hospital (which event happened March 7, 1862) the tinct. thujæ in ʒj. doses three times a day, but without any beneficial results, as the tumor is insidiously increasing, and it appears to me that the case is hopeless.

Remarks.—In the pathological museum of the New York Hospital there is a plaster cast of a remarkable case of this kind. The tumor is represented as being very extensive, and finally, I believe, terminated the patient's life. In the same hospital Dr. Gurdon Buck had a similar case to the one here reported by me, which went on increasing to a formidable extent, and the patient was finally discharged incurable. The tincture formed from the leaves of Thuja occidentalis was first extensively employed by the late Dr. Wallace, of New York, in treating malignant disease of the eye and lids. My friend, Dr. James R. Leaming, of the same city, has had remarkable success with the remedy in treating epithelial cancers, and in one case, when the disease was located in the palmar surface of the hand, which was examined by several eminent surgeons, and his diagnosis verified, he succeeded in entirely eradicating the disease.

Reports of Societies.

UNITED STATES ARMY MEDICAL AND SURGICAL SOCIETY, OF BALTIMORE.

STATED MEETING, Feb. 26, 1863.

SURGEON C. C. COX, U.S.V., PRESIDENT, IN THE CHAIR.

[Reported by DR. GEO. H. DARE, Acting Asst. Surg., U.S.A., Secretary.]

DISCUSSION ON TETANUS.

(*Concluded from page 223.*)

ASSIST. SURG. HUNT, U.S.A., remarked that tetanus was the only nervous disease which ever assumed an epidemic form. He stated that in a section of country on the shore of Long Island tetanus was endemic. This was attributed by the people to the common use of fish as manure on the land.

Dr. Hunt made some remarks upon the different physiological effects of opium and belladonna upon the spinal cord. He objected, on theoretical grounds, to the use of opium in tetanus, and recommended belladonna and the cold douche.

E. G. Waters, Act. Assist. Surg., U.S.A., reported two cases of traumatic tetanus. In the first case the symptoms were well marked, including opisthotonos and emprosthotonos. He was treated by Dr. Stevenson of New York city, and recovered. In the second case five or six days after the receipt of the injury trismus appeared, afterwards the thoracic and abdominal muscles became affected; there were well marked opisthotonos and emprosthotonos.

The boy was treated with spt. turpentine, ʒj. every three or four hours, and the same remedy applied externally to the spine, neck, and scapula. The boy recovered from the tetanus; for the spasms subsided and disappeared under the above treatment, and he remained entirely free from them for three days. He had expressed a great desire for buttermilk, and was allowed to have it in small quantities, but proper attention not being paid to him he drank an enormous quantity, about half a gallon. Emesis came on, which proved uncontrollable by remedies, and he sank from exhaustion produced by vomiting.

Dr. Waters remarked that if the affection of the stomach was considered as resulting from metastasis, it was no less remarkable than a cure.

The cognate disease, poisoning by strychnia, having been alluded to, Dr. Waters narrated the case of his own child three weeks old.

Its mother had been taking ext. nux vomica in half grain doses in combination to relieve constipation; in this it did not succeed. After the mother had taken three grains in all the child was attacked with laryngismus stridulus; the spasms also affected the muscles of the face, neck, jaws, and trunk, with marked remissions.

Camphor was used very freely externally and internally. Within twelve hours the spasms were subdued.

Doctor W. remarked that it was evidently not a case of trismus neonatorum: the child was too old, the spasms too extensive and violent, and the general condition too good. There was no trouble about the child's head.

Surg. Bliss, U.S.V., spoke briefly of several fatal cases of traumatic tetanus which had occurred under his observation. He said that the theoretical indication was to put the nervous system as far as possible asleep to external impression, by means of sedatives, such as belladonna, chloroform, etc., until some beneficial change took place in the wound.

The Society then adjourned.

FOREIGN CORRESPONDENCE.

LETTER XXXIV.

By PROF. CHARLES A. LEE.

FLORENCE.

October 31, 1862.

The principal hospital of Florence was founded as far back as 1286, by the father of Dante's Beatrice. It covers a large area of ground, though it has but one court of any great size. It numbers over one thousand beds. In consequence of the fashion to bequeathe property to hospitals it became very rich, but in the last century the government seized upon all its possessions, and has since administered them. It contains wards for males and females, divided, as usual, into medical and surgical; a syphilitic ward, one for contagious disorders, one for ophthalmic diseases, a lying-in ward, *one for the delirious in fever*, and one for cutaneous affections. It also receives children, who, as in most Italian hospitals, are scattered around among the other patients.

The main portion of the building is in the form of a cross, the longest section being divided longitudinally into three long wards by partition walls. Of course none of them can be well lighted or ventilated. The air can only be admitted on one side, and that in limited quantity. The wards forming the transepts labor under the same inconvenience. The lying-in ward has two small windows at one end of the room, otherwise it has no means whatever for the admission of either light or air. The upper wards are still worse, and those appropriated to syphilitic and ophthalmic cases are unfit for any human beings to stay in for any length of time. I am indebted to the kindness of Dr. Gloig, one of the attending physicians, for showing me over the entire establishment, and explaining everything connected with its management. It seems that no statistical reports of admissions, diseases, deaths, etc., have ever been published; one reason assigned was, that the doctors could not agree as to the names of the diseases. In regard to the ratio of mortality, it was stated that the number of deaths averaged about two daily. During some seasons of the year the number of patients reaches as high as two thousand. At present it is considered a healthy season. There is one small ward for pay patients, at present containing about a dozen, who pay two and a half francs each per day. The ventilation, however, like every other part of the buildings, is very imperfect, and all the surroundings disagreeable; very different from what I found at Berlin, Vienna, and Venice. All the wards were too crowded, the beds being within four feet of each other, and the rooms quite narrow. The whole establishment was pervaded by a strong, disagreeable hospital smell, and the upper wards were so close and stifling that I was very glad to escape from them as soon as possible. The floors, also, did not present that degree of cleanliness that ought always to be found in such institutions; they were of brick, which does not show dirt quite as readily as polished deal or marble. In Venice all the floors of the hospital buildings were of hard, polished breccia composition, as hard and smooth and even handsomer than marble; a most admirable plan, and one which we might introduce with advantage into our own country. The nursing in this *Spedale di Santa Maria Nuova* is done by females who belong to an order of nuns who devote themselves to such works of charity and mercy. The *Sisters of Charity* are regarded here with suspicion, and are not employed in the hospitals in any capacity, under the impression, perhaps suspicion merely, that they belong to the order of Jesuits, who are now regarded with disfavor all over Tuscany at least.

In regard to the treatment of *fevers* in this establishment, I was told by Dr. G. that very little medicine was used in those of the typhus and typhoid classes, the main dependence being placed on suitable diet. In the malarious diseases, *quinine* is used freely—in ordinary cases to the extent of sixty centigrammes three times a day, and in those of a pernicious class, as much as four grammes were given at a single dose, and repeated according to circumstances. Bleeding, he stated, was rarely resorted to in this hospital for any disease. Patients would often come in the spring of the year and insist on being bled, in accordance with the old superstition, and in such cases he generally indulged them in their whim. The small-pox ward has been unusually full during the last year, the disease having prevailed extensively in an epidemic form, attacking almost indiscriminately those who had been vaccinated and those who had not. The scarlet fever also has been extremely rife and fatal in this city during the last year, although there had been but few cases of it during several preceding years. The croup is also a very common disease here, and is treated usually with emetics and blistering; zinc is a favorite emetic, but the physicians have no faith in tracheotomy, and it is very rarely if ever resorted to. The surgery of the hospital, I should judge, from what I could learn, is of a highly respectable order. The surgical *armamentarium* is certainly most formidable, and presents an array of instruments, ancient and modern, which ought to satisfy the most bloodthirsty aspirant for chirurgical honors; and I will remark, by the way, that Italian surgical instrument makers will not suffer by comparison with those of the English, French, or any other nation.

In regard to the dietary of the hospital, there are three grades or degrees. The *first* consists of four potages, or soups, with an allowance of coffee, and some meat. The *second* of two potages, bread, and a little chicken. The *third* of chicken, boiled or roast beef or mutton, bread, etc. The allowance for the last, or what is considered full diet, is one pound of meat, one and a half of bread, and half a pint of wine. This is considered a very generous allowance, "for," says Dr. G., "at Naples, they keep their patients for days and days together on nothing but oranges!" There are eight principal surgeons belonging to the establishment, and ten internes who have not completed their studies. There are also ten principal physicians, and four assistant physicians who have completed their studies, but who wish to improve themselves in practice. They do not reside in the building, but alternately spend the whole day in the wards. There is an infirmary also for out-door male patients, and one for out-door female patients, and two physicians connected with each. This hospital has long been the great school of practical medicine for Florence, if not for Tuscany generally, and has produced some of the most eminent physicians, surgeons, and anatomists of Italy. It is not a completely organized medical school, nor has it the power of conferring academical degrees; but it is simply a *practical school*, where medicine, surgery, and midwifery are clinically taught. The Medical University is at Pisa, where students have to pursue their studies for five years, when they receive a diploma; but this does not entitle them to practice until they have pursued their studies two years longer at this school in Florence, when they receive a certificate to that effect which authorizes them to commence practice.

There is an extensive anatomical and pathological museum connected with this hospital, which is said to be one of the most valuable in Italy. It is, however, in my judgment, very far inferior to that at Bologna, which may well rank among the first in the world. Still this is a most valuable collection, illustrating every department of pathology by wet and dry specimens, carefully prepared and well preserved, and also beautiful wax preparations, illustrating every form of external and internal disease. The anatomical preparations are chiefly intended to illustrate regional anatomy, while descriptive anatomy is more especially taught at Pisa. There is no school, perhaps, in Europe where pathological anatomy is more thoroughly and successfully taught than here.

In the museum of this school, also, are the celebrated preparations of Legato, who died about thirty years ago. This celebrated anatomist discovered a mode of changing all animal tissues into stone without changing their form or color in the slightest degree, and even preserving the natural flexibility of the ligaments, tendons, and joints, etc. Here is a tablet, perhaps a foot and a half square, inlaid with splendid mosaics in ornamental figures, consisting entirely of the various textures of the body converted into stone, hard and smooth as polished marble. For example, a portion of liver, lung, spleen, skin, kidney, penis, uterus, cartilage, muscle, brain, nerve, spinal cord, membrane, eye, bone, etc., etc., all retaining their natural color, and readily recognised by the anatomist. This celebrated genius did not meet with that encouragement which he expected and deserved for his most important discovery, the government entirely ignoring his valuable services, and the secret accordingly perished with him. Among the animals converted into stone I noticed the rat, cat, spider, fishes, etc., all looking perfectly natural. In connexion with museums of anatomy and pathology I cannot pass by in silence that most magnificent collection in the Pitti Palace, which goes under the name of the *Museo di Storia Naturale*. Commencing with the Grand Ducal Medicis, several of whom were great patrons of the natural sciences, it has been gradually enlarged by succeeding dukes and princes, and by naturalists, in every department, until it stands almost unrivalled among similar collections in Europe. Although the collections in natural history are worthy of all praise, both for their extent, admirable arrangement, and perfect preservation, yet the wax models illustrating the anatomy of the human body are entirely unsurpassed in point of beauty, accuracy, and truth, by any preparations of the kind hitherto attempted. It is perfectly safe to say that no such collection is known to exist, and that it is next to impossible that any should surpass it. The most ancient were executed by Zummo, a Sicilian, and represent the human body in various stages of decomposition. These, however, are few and comparatively unimportant. The greater portion represent healthy human anatomy, the bony structure, the ligaments, muscles, nerves, brain, membranes, organs of sense, viscera, organs of generation (male and female), pregnancy in all its stages, the placenta, uterus after delivery, fœtal circulation, absorbents and lymphatics, lacteals, heart, etc., etc. The entire series, illustrating the phenomena of utero-gestation, are especially admirable. Comparative anatomy is also extensively illustrated; especially the structure of the torpedo, the anatomy of the silkworm, the leech and cuttle-fish, the cat, dog, sheep, calf, turtle, fish, the common fowl, the hen's egg, etc., etc.

There are also wax models of vegetable anatomy, illustrative of the minute structure of plants; these were principally prepared under tho direction of the celebrated Amici. The magnified representations of the microscopic parasites which produce or accompany the disease of the vine (*oinium*) are also very interesting. The entire collection is an honor to Florence and to Italy itself.

Attached to this Museum is the Temple erected by the last Grand Duke to Galileo, and inaugurated upon the occasion of the meeting of the Italian Association for the Advancement of Science in 1840. In the centre is a statue of the Tuscan Philosopher, surrounded by niches in which are placed busts of his principal pupils, and with presses containing the instruments with which he made his discoveries, including the telescope with which he discovered the satellites of Jupiter, etc. Under a glass cover is preserved one of the fingers of Galileo, which was abstracted by Gori when his remains were removed from their first resting-place to the tomb erected in the Church of Santa Croce. The walls are beautifully inlaid with marble and jasper; the ceiling is richly painted in compartments, representing the principal events of the life of Galileo, and all the talent of Tuscany has been employed to render this temple worthy of the object for which it was intended. It is said to have cost nearly $200,000, not including the price of the manuscripts of Galileo and his pupils, which the Grand Duke had collected irrespective of cost, and which are preserved in the library in the Pitti Palace. Attached to the museum is a botanical garden, rich in rare and exotic plants.

Action of Quinine.—That quinine is a tonic I have long had reason to doubt. Quantities of this valuable drug appear to me to be annually wasted in administering it in all sorts of affections as a simple means of increasing appetite or communicating strength. I consider it a vegetable alkaloid, which, like others of its class, operates on special parts of the nervous system through the bloodvessels. Why it does so we are ignorant. That vegetable poisons do possess this influence constitutes an ultimate fact in the science of therapeutics. But in a similar manner to that in which opium operates on the brain, strychnine and hemlock on the spinal cord, and other drugs operate on other parts of the nervous system, so, I believe, quinine acts on the ganglionic system of nerves, controlling and diminishing those phenomena of fever which physiology has proved to be produced by their irritation or injury.—(*J. Hughes Bennett*) *Lancet.*

The report of the death of Dr. Geo. Suckley, Medical Director of the Eleventh Army Corps, is incorrect; Dr. S. remained with the wounded, and is a prisoner.

Dr. R. J. Levis has retired from the editorship and proprietorship of the Philadelphia *Reporter*, and entered the army as a Surgeon of Volunteers.

American Medical Times.

SATURDAY, MAY 16, 1863.

A CITY OF NUISANCES.

New York City received its usual New Year's congratulations from the Mayor and its numerous Health Authorities on its excellent sanitary condition. The Mayor discoursed pleasantly, and in the most mellifluous phrases, on the efficiency of the different health organizations, and especially of the Commissioners of Health, over which he himself presided. Nor did he fail to remind our citizens of the grievous infliction which the city had escaped, through his efforts, in the defeat of the Metropolitan Health Bill the year before, by means of which all these efficient health organizations, now costing half a million annually, would have been displaced. The City Inspector took up the subject in the same pleasing strain, and in his annual report informed the Common Council that New York was the healthiest city in the world, and that London and Paris could not compare with it in sanitary regulations and in the state of the public health. The City Fathers received these official reports with all due gratitude, but simple-minded citizens fell to wondering what must be the condition of the unfortunate European cities which were in a more unfavorable sanitary state than New York.

The season of congratulation passed, and the earnest work of the year commenced. Our health authorities, having defeated every measure of legislative reform, relapsed into their usual idleness. The city has been allowed to take care of itself, and now presents a spectacle of accumulated nuisances which excites the shame of even the Mayor and the City Inspector, and which is beginning to tell, according to the latter, with fatal effect upon the health of the inhabitants. In a late communication he says:—

"Since my last communication of the 26th of March there has been no improvement in the cleaning of the streets, but on the contrary the city, at this moment, is in a more filthy condition than has heretofore been the case at this season of the year, notwithstanding the favorable condition of the weather for street-cleaning purposes. As an evidence of the effect of this state of things upon the health of the community, I would state that the mortality of the city from the first of March has been largely on the increase, until it has now reached a point of fearful magnitude. For the week ending April 27, there were reported to this Department one hundred and forty more deaths than occurred during the same week of the previous year. Were this increase of mortality the result of an existing pestilence or epidemic among us, the public mind would become justly alarmed as to the future; but although no actual pestilence, as such, exists, it is by no means certain that we are not preparing the way for some fatal scourge by the no longer to be endured filthy condition of our city."

It is doubtful if there is a city in the civilized world that contains within its jurisdiction as many sources of that class of diseases known as preventible, or capable of being removed and destroyed, as New York. They are thickly strewn in every street, in every lane, and even in every dwelling and shop. Many of these sources of public and private pestilence are brought to light in the recent report of Capt. Lord of the Sanitary Company of the Police, and others are apparent to any careful observer. As we are rapidly ripening, in the opinion of the City Inspector, for a spontaneous epidemic, it will not be unprofitable to point out some of the more common sources of diseases which are allowed to exist in our midst. In this review we shall notice only those causes of disease which are capable of being removed by an efficient Board of Health.

In regard to tenement houses, the report referred to contains the following frightful summary:—

"The total number of tenement houses is given at 12,374, with a population of 401,376, of whom 22,095 live in cellars —a subterraneous population large enough for a small city in itself. A little more than two-thirds of the houses, namely, 8,546, with a population of 253,901, are provided with good means of escape in case of fire, while 3,801 houses, inhabited by 125,380 persons, are deficient in this respect. The ventilation of 8,126 houses, containing 238,113 persons, is reported as good, and 4,221 houses, containing 141,168 persons, are badly ventilated. The following is an exhibit of the number of cubic feet to each person:

	No. of Houses.	Population.
Having from 100 to 300	1 909	62,988
Having from 300 to 400	3,031	102,848
Having from 400 to 500	2,560	78,751
Having from 500 to 600	1,661	48,342
Having from 600 to 700	1,100	31,752
Having from 700 to 800	798	22,281
Having from 800 to 1,000	1,288	82,809
Total	12,347	379,281

Of slaughter-houses we have the following exhibit:— The number of slaughter-houses in the city is 187, of which 40 are reported as in bad condition. The number of beeves slaughtered per week is given as 2,555; of small stock, 9,362; of swine, 13,205; total per week, 25,222; grand total per year, 1,311,544. Akin to slaughter-houses are those sinks of putridity, fat-boiling establishments, of which there are no less than eighty in New York. These establishments are frequently indicted as nuisances, and are generally located in densely populated districts; but against neither can our health officials be induced to proceed.

Uncleaned streets, courts, and alleys, are the most apparent sources of disease during the summer months. It would be considered an exaggeration by one familiar with the condition of New York, if we were to state that our streets were never before in such a horribly filthy condition. And yet it is susceptible of demonstration by actual measurement that the refuse matter of dwellings, garbage, etc., which fills the streets in the districts inhabited by the poor, is deeper by several inches than at any former period. Many streets are actually shunned by carmen on account of their impassability by loaded carts. The material which has been allowed to accumulate in the streets is of the most putrescible character. Little attention is now paid to garbage boxes, but all the refuse of the dwellings is thrown promiscuously into the streets, from which it is apparently never to be removed. Here it lies the hot summer through, sending forth its disease-generating emanations which fill with disgusting odors all the air, and permeate every habitable recess.

To this summary should be added neglected overflowing sinks, vacant lots strewed with dead animals, obstructed sewers, dumping grounds in the vicinity of populous neighborhoods, etc., etc. And these sources of disease are only those which may be noticed by the most casual observer. What numberless and unsuspected causes of sickness would not a thorough investigation by a competent Commission reveal? How many districts inhabited by the wealthy would be found in an unhealthy condition, and perhaps underlaid with the rapidly developing germs of endemic diseases? How many palatial residences, not even excepting those bearing the insignia of the mayoralty, would be proven to harbor the secret causes of family decay and early death?

No philanthropic person can contemplate the picture which we have feebly drawn, and reflect upon the terrible evils which are visited upon this community, seen and unseen, recognised and unrecognised, without a feeling of the keenest sorrow. And how much will that sorrow be increased when he is reminded that all these evils are susceptible of removal, but that the measures to be employed are always to be thwarted by those who gain wealth and power by their perpetuation! Health reform seems, indeed, to be impossible in New York. It will never be urged as a political measure, and thus combine powerful party influences. It is brought forward by those who are influenced only by motives of benevolence, and is opposed by partisans who are grasping power. Over a venial legislature the opponents of reform will, we fear, ever prevail.

THE WEEK.

In alluding to the case of trephining in fracture of the spine by Dr. Potter in a recent number of the Medical Times, Dr. Brown-Séquard strongly advocates the operation. He says:—

> "It seems to me that in my work I have given reasons enough to show, and facts enough to prove, 1st, that the laying bare of the spinal cord is not a dangerous operation; 2d, that death after a fracture of the spine being usually due to the effects of a pressure upon, or of some irritation of, the spinal cord, it is of the utmost importance to remove the pressure and to diminish the causes of irritation; 3d, that reunion may take place after a wound of the spinal cord; 4th, that the removed parts of the spine may be replaced by new bone; 5th, that no patient seems to have derived any harm from the operation, and that a great many have derived from it either a temporary or a permanent benefit. * * * * I will only say one more word: Here is an operation recommended by men who are not physicians or vivisectionists like me, but surgeons of the greatest eminence, such as Louis, Henry Cline, Tyrrell, Chelius, Mr. J. E. South, Sir Astley Cooper, and many others—an operation which has been often performed, with a temporary or a permanent success, but which is, however, neglected by most surgeons and proscribed by some, who criticize it theoretically. Is it not a sad spectacle that there is such a neglect and such a criticism when so much is at stake as the life of many men every year? Sir Astley Cooper said, 'The operation is laudable and not severe: nor does it increase the danger of the patient. If we could but save one life in a hundred we would deserve well of mankind.' To this I will only add, that the proportion of lives saved is now, not 'one in a hundred,' but from twenty to twenty-five in a hundred."

The opinions of this eminent writer deserve the most serious consideration of surgeons.

We commence this week the publication of a short series of lectures on the Diseases of the Respiratory Organs in Children, by the late Dr. C. Van Alen Anderson. Dr. Anderson was an alumnus of the College of Physicians and Surgeons, and prepared these lectures for the Spring Session of 1862 in that Institution. The rapid progress of the disease of which he died prevented their delivery. Dr. Anderson made the diseases of children his special study both in Europe and in this city, where he was for three years physician in that department at the Demilt Dispensary. His lectures are marked by extensive research and mature judgment, while the admirable style in which they are written will commend them to general perusal, and increase the number of those who lament the early death of one who gave promise of so useful and brilliant a career.

The Medical Board of Bellevue Hospital have recommended the opening of wards for the following specialties in that Institution, viz. Diseases of the Eye and Ear, Skin, Nervous System, and Orthopœdia. The appointments of physicians and surgeons, two for each division, for these several places, have not been made.

Reviews.

A Practical Handbook of Medical Chemistry. By John E. Bowman, F.G.S. Edited by Charles L. Bloxam. Third American from the fourth and revised London edition, with Illustrations. Philadelphia: Blanchard & Lea, 1863. pp. 351.

This work is a most convenient treatise on Chemistry applied to medicine. It enables the student and practitioner to apply all the various tests in the study of the urine, blood, mucus, etc., and with accuracy. This edition is fully up to the present state of medico-chemical knowledge.

On Diseases of the Skin. By Erasmus Wilson, F.R.S. Fifth American from the fifth and revised London edition. With plates and illustrations on wood. Philadelphia: Blanchard & Lea, 1863. Pp. 694.

The present American edition of this work has the plates bound in the same volume with the text. The edition has been carefully revised by the author, and presents the most recent views of the pathology and treatment of skin diseases. We cordially recommend the work to the profession.

Correspondence.

HOSPITALS FOR OPERATIONS.

[To the Editor of the American Medical Times.]

Sir:—The above is the heading of an article in the Medical Times of April 18, 1863, signed P . . . ., from which I take the following extract:—"In our General Hospitals, as at present arranged, the Medical Staff is too small to be in condition, as to time (to say nothing of skill, etc.) to perform all the operations that should be performed."

The sweeping charge of incompetence as applied to the Army Medical Corps is not only unprofessional and ungenerous but it is unjust; yes, more, it is false.

If P. . . . does not wholly disregard truth, and will refer to the Army Register, he will withdraw that part of his article which intimates that the Medical Corps of the army is not skilful, for it embraces many of the leading (formerly civil) surgeons in our country.

To the excellent surgeons whose names appear in the article referred to this untimely puff is unnecessary, and perhaps unacceptable—while to the Medical Corps the insinuation of incompetence is an offensive and uncalled for slander, that, I trust, will call forth proper treatment from the Medical Corps of the Army.

Yours, etc.,
Surg. Vols.

St. Louis, Mo., May 4, 1863.

BROMINE IN ERYSIPELAS.

LETTER FROM B. WOODWARD, M.D., TO M. GOLDSMITH, SURG. VOLS. AND MED. DIR.

Park Barracks, Louisville, Ky.,
Feb. 26, 1863.

Dr. Goldsmith,
Act. Med. Director,

Dear Sir:—The very lively interest which is evinced by gentlemen from abroad in your great "idea," "the Action and Influence of Bromine," induces me again to offer the results of the experiments which, under your orders, I have been enabled to make.

Of its results, so far as its prophylactic action against erysipelas is concerned, you are well aware; and yet it may not be amiss to state that, since its use in vapor in the crowded wards of these barracks, and from which, before its use, we got from five to eight cases of erysipelas per week, not one case has originated in them, and all the cases which have appeared have come from the crowded Sibley tents.

In the hospital wards, where we have had as many as sixteen cases at a time, side by side with other sick and wounded men, there has not been an instance of its spreading among them. So well is its power established to prevent the spread of erysipelas that even the ward-masters and nurses, who used to dread the effects of being in the wards with erysipelas patients, no longer fear it in the least, for they see there is perfect immunity from danger.

As you are aware, sir, I have considered erysipelas, diphtheria, pyæmia, and hospital gangrene, as one and the same disease, having local manifestations. Acting on this theory I was early led to the use of bromine, both locally and constitutionally, in diphtheria, after having tested its virtues in erysipelas.

It is generally conceded that diphtheria is infectious, its virus being disseminated in the atmosphere and inhaled as the virus of any other disease is, which has a cell origin; and though we have had a number of bad cases, in which the exudation was well made, and the constitutional disturbance great, in the same wards with the other patients, not a case has originated from the infection. And when they have been brought in from the tents they have been unhesitatingly put in the common wards with others. And for the treatment of the disease no means have been found so effectual as the inhalation of the vapor of bromine, and the exhibition of from half a drop to a drop and a half in glycerine every four, five, or six hours, according to the severity of the case. In one case, in which from the œdema of the fauces and the denseness of the exudation the air-passages were completely occluded, and the man was actually dying from suffocation, after saturated solutions of nitrate of silver and sulphate of copper had failed to give any relief, the direct application of pure bromine by a probang caused the instantaneous separation of the exudation, and it was coughed up in large plates. It was the knowledge of the power of bromine to instantly destroy wet animal tissues that induced me to use it in this case. The whole back of the mouth and fauces were so covered with exudation that little damage was done to the true tissues. It was a hazardous proceeding, and nothing but the urgency of the case could justify it—indeed tracheotomy would have been resorted to, if it had been possible to control the motions of the patient. The inhalation of bromine vapor, and giving it by the mouth in one drop doses in glycerine every five hours, were the only means resorted to in the treatment of the case, and he made a good recovery. Five other cases, well marked, were also treated with bromine in vapor and by the mouth, with the best results. We are now, sir, using bromine in both primary and secondary syphilis, with marked success. In two cases of true Hunterian chancre the effect of its local use has been to soften the hard base and bring on healthy action. In one case of phagedena, where the whole dorsum of the penis was involved, Dr. Keefer, in whose charge the syphilis ward is, has used it in solution, one part to forty of water. It is well borne, and within twelve hours the swelling was arrested, and now, on the fourth day after its exhibition, the whole sore is covered with healthy granulations, and the pus is laudable.

In the treatment of syphilis and diphtheria, and since the use of bromine in the barracks and in hospitals, nineteen or twenty, as a prophylactic, I have the satisfaction to report that *not one death has occurred* from either of those diseases or hospital gangrene. In the Erysipelas Hospital, No. 19, there was a case of gangrene of the mouth and tongue from gunshot at the battle of Stone River. Dr. Curtis, the assist. surgeon, reported that all known means had been exhausted, without any good results. I ordered bromine, both by vapor near him and constitutionally. Although he lay comatose, and the whole head was involved in erysipelas, sloughing of the one cheek and the tongue were going on, and the fetor was intolerable, within twelve hours the sloughing was arrested, the wounds took on healthy action, and on this treatment alone he made a good and rapid recovery.

In hospital gangrene in Nos. 7, 3, and 19, the most remarkable effects of the use of bromine have been seen. Although I cannot with propriety "report" them, I beg leave to state some cases of remarkable interest, which, by the kindness of the surgeons at those hospitals, I have been allowed to see. At Hospital No. 7 there is one case of gunshot wound of the foot in which the gangrene included the whole upper part of the foot from the toes to the talus. The teguments and muscles had all sloughed away, leaving the extensor tendons bare and isolated. The local use of the bromine had arrested the slough, and the line of demarkation was well marked.

Another was at the same hospital of wound of the leg by a piece of a shell; the gastrocnemius and soleus were bared for a space of eight inches by three inches; after the direct application of bromine the "line" was well marked, and the wound took on healthy action.

Another case at the same hospital: the tibia was bared and denuded of periosteum, but the same good results were had from the use of bromine.

At Hospital No. 3 I was shown two cases of gangrene; in one the slough had not only destroyed the muscles of the right arm, but the humeral artery had been sloughed and ligated.

Another, and perhaps the worst case, at the same hospital, where the slough had carried away integument, obliquus externus, and obliquus internus, so that for a space of eight inches by five inches, there was nothing left but the tendons of the obliquus internus, and the peritoneum, the sloughing had been arrested and the whole wound was covered with healthy granulations. In all these cases the peculiar fetor of gangrene had disappeared.

All these cases were mixed in with sick and badly wounded men, and yet there had not been an instance in which others had taken the disease. All these cases were gangrenous when brought from the front to this city, and I cannot find an instance in which it originated here. This, as Dr. Goldsmith, in charge of Hospital No. 7, said, can only be attributed to the prophylactic power of the vapor of bromine in the wards, and, to use his own words, "we are doing with the greatest impunity what, a year ago, we should not have dared to do, viz. putting these cases in the wards with other wounded men."

Bromine has directly stimulant and tonic action, as well as antiseptic. Under its use the volume of pulse is increased, but not its frequency. The skin becomes warm, the secretions from the kidneys increased, and the deposits of the urine are largely increased.

The question is frequently asked: "What is the effect of the vapor of bromine upon intercurrent diseases?" In no case whatever has it had a bad influence, and I am firmly of the opinion that in the asthenic points of disease which we meet in military hospitals it is always of decided advantage. This, I think, arises from the tonicity it gives to the system, as well as its power to destroy morbid cell-matter in the air, which, breathed, necessarily reacts on the sick themselves, or, in other words, it directly purifies the air of morbid matters, while its own vapors arise of themselves tonic and healthy.

To my own mind the results of its use are these: It is a prophylactic to all those diseases which depend upon cell formation for their propagation, and it is one of the best antidotal agents to these diseases of which we have any knowledge.

I have the honor to be, Sir,
Your ob't serv't,
B. Woodward.

Army Medical Intelligence.

ORDERS No. 28.

Lovell General Hospital,
Portsmouth Grove, R. I., May 7, 1863.

In obedience to instructions from Surgeon-General through Medical Director's Office, Department of the East, dated New York, May 6th, 1863, the General Hospital at Portsmouth Grove, R. I., will hereafter be designated the "Lovell General Hospital," in commemoration of the first Surgeon-General of the Army.

By order of the Surgeon in charge,
Wm. F. Cornick,
Asst. Surgeon U.S.A.

Medical News.

M. Desormeaux, Surgeon to the Necker Hospital of Paris, has used for some ten years past a urethroscope which has very nicely answered the purpose, after having been gradually improved and brought nearer to perfection. The *Gazette des Hôpitaux* of the 14th instant, states that strictures have been clearly seen with the instrument, which consists of a tube containing a metallic mirror, pierced in the centre, and placed at an angle of forty-five degrees with the axis of the instrument. The tube ends in a piece which is intended to be connected with the catheters introduced either into the urethra, the nasal fossa, the pharynx, or any deep canal. The opposite end of the tube is connected with a diaphragm pierced in the centre like the mirror. At right angles with this tube, a second one is fixed, in which a gas-lamp is placed. The light of this lamp, reflected by a concave reflector, falls on the slanting mirror, which latter directs it upon the region to be examined. A lens may also be used to cause the rays of light to converge on the object to be viewed. Some nicety is required in the handling of the instrument, and a certain amount of practice is indispensable; but the instrument bids fair to turn out very useful. The catheters are open at the side, to allow of the introduction of sponges, etc.—*London Med. Rev.*

Resignation of Professor Samuel Jackson.—We learn that Professor Jackson, who so long and very ably filled the chair of Physiology in the University of Pennsylvania, intends at once to tender his resignation. Dr. J. was an enthusiastic, highly interesting, and brilliant lecturer, and inspired his hearers to a great extent with his own zeal for physiological investigations. We wish him in his retirement the repose he is so well entitled to, with health, long life, and every comfort—*Med. News.*

M. Legrand relates a curious case which occurred lately in a small town in France. A clerk was accused of robbing his master of some bank notes. He denied the charge, but was arrested. Whilst under charge of the police, he was seized with fever, became delirious, and during his delirium frequently cried out, "I am a robber," etc. On his recovery, he was again interrogated by the magistrate, and indignantly denied the charge. Hereupon the magistrate, puzzled, demanded of the prison-doctor "whether the words of a patient suffering from typhoid fever, and uttered during delirium, could be considered as of any value?" The doctor very wisely declined to give an answer, and consulted M. Legrand, who thereupon drew up an answer to the question, which was to the effect that words so uttered could only be considered as mere indications of guilt. The magistrate accepted this view; and, for want of better proof of guilt, the young man was liberated. —*Brit. Med. Jour.*

Vaccination in the Post-Office.—We understand that Dr. Waller Lewis, the Principal Medical Officer of the Post-office, has, on account of the great prevalence of small-pox in London and the suburbs at the present time, recommended that all the officers who have not taken the disease naturally, or who have not been vaccinated recently, should be advised to get themselves revaccinated; also, that his Lordship the Postmaster-General has sanctioned this recommendation. We are of opinion that this example should be followed in all public and private establishments where large numbers of persons are employed.—*Lancet.*

Philadelphia in 1862.—The city contains upwards of 94,000 dwelling houses. The population, according to the census of 1860, was 568,034. This gives a population of only 6·02 to a dwelling house. Excluding the deaths in the military hospitals the mortality of the city was one in forty-three, or 2·32 per cent. The births during the year were 14,741, being 2,530 less than the preceding year. The marriages were 4,662, being 245 more than during the preceding year.—*Reporter.*

Resident Physicians at the Philadelphia Hospital (Almshouse).—The terms of service of Drs. Wood, Maury, Owens, and Girvin, Senior Resident Physicians in the Philadelphia Hospital, having expired, an election was held by the Board of Guardians of the Poor on the 23d ult., for four junior resident physicians. The election resulted in the choice of Drs. Richard G. Ludlow, J. A. Hagy, Edward Rhodes, and Josiah Reeve.

Five Cases of Gunshot Fracture of the Femur are reported as successfully treated with "Smith's Anterior," by Charles A. McCall, M.D., U.S.A., at the Mount Pleasant U. S. General Hospital, Washington.—*Med. & Surg. Rep.*

Philadelphia School of Anatomy.—The Philadelphia School of Anatomy has passed under the management of Dr. James E. Garretson, who has been attached to the school as demonstrator.—*Med. & Surg. Rep.*

Association of Medical Superintendents of American Institutions for the Insane.—The seventeenth annual meeting of the Association of Medical Superintendents of American Institutions for the Insane will be held at the Metropolitan Hotel, in the city of New York, on Tuesday, May 19th, 1863, at ten a.m.—*Med. & Surg. Rep.*

Sensitive Barometer and Thermometer.—At a recent meeting of the Manchester Literary and Scientific Society, Dr. Joule exhibited a thermometer of remarkably delicate construction. It shows a variation of temperature amounting to no more than a few ten-thousandths of a degree. He has also exhibited a barometer by which he states that he is enabled to observe the effect of a variation in its elevation of "less than one inch."—*Lancet.*

Chicago Medical Society.—At the regular Annual Meeting of the Chicago Medical Society, held April 3d, 1863, the following officers were chosen for the ensuing year:—For President, Gerhard Paoli, M.D.; Vice-President, M. O. Heydock, M.D.; Secretary and Treasurer, E. L. Holmes, M.D.

Original Lectures.

DISEASES OF THE RESPIRATORY ORGANS IN CHILDREN.

BEING A COURSE OF LECTURES PREPARED FOR DELIVERY DURING THE SPRING SESSION OF 1862 IN THE COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.

BY THE LATE

C. VAN ALEN ANDERSON, M.D.,

PHYSICIAN TO CHILDREN'S DEPARTMENT, DEMILT DISPENSARY, N. Y.

PART II.

ATELECTASIS.

Atelectasis, of course, appears in the infant immediately after birth, and according to its extent with more or less intensity in the symptoms. The child has probably, to all appearance, been still-born, but yet by some effort has been resuscitated. The vital processes, however, are not well performed. The temperature of the skin is lower than it should be, and perhaps even falls lower still in a short time. Its color is pale, the face, particularly the lips, having the lividity of asphyxia. The child, moreover, is dull—it sleeps even more than newly born infants are accustomed to. Instead of a loud, hearty cry, it has a wailing kind of a whimper from absolute want of breath. It sucks with great difficulty, and if much of the lung be involved, not at all. The pulse is weak and languid, the bowels inclined to constipation; and if there be not sufficient trouble to destroy life at once, the infant pines and becomes feeble and emaciated.

If we now direct our attention to the respiratory organs, what do we find? The first thing that strikes us is that respiration is imperfect, incomplete, and intermitting. There may be also a slight cough. The chest is hardly at all dilated, whereas, though in healthy infants the respiration is chiefly abdominal, the movements of the thorax are quite marked. The ear applied to the chest hears but little air entering, and vesicular breathing may be indistinguishable; while, as you would naturally suppose where there is solidified lung, percussion is dull. As the symptoms advance, the dusky hue of the skin increases, and its temperature grows colder. The difficulty in sucking becomes greater, and the voice more wailing and fainter. Presently a slight twitching is observed about the corners of the mouth, or in some portion of the face, which in the course of a few hours develops into general convulsions.

These convulsions are brought on by the slightest causes —rapid movements or changes of posture even; and during their existence the respiration is extremely labored. These symptoms increase, and finally the infant dies of apnœa; or else, if there is not sufficient atelectasis to produce immediate death, nutrition is interfered with. The child cannot obtain sufficient food during its efforts to suck; the blood is not properly aerated; it becomes languishing and emaciated, and finally ceases to live, because it can obtain nothing to live upon. If you make a post-mortem examination in a child that has died with these symptoms, you will find the appearances which have been already described—lobules condensed, depressed below the surface of the lung, of a dark red or violet color, sinking readily in water, and cutting like a piece of flesh. If the lung be inflated, these unexpanded portions will be distended with more or less difficulty, and on being filled with air will assume the color, the crepitation, and the friability which are found in normal pulmonary tissue. They are usually met with in the lower edge of the upper lobes, the middle lobe of the right lung, and the posterior part and lower edge of the lower lobes. The pulmonary vessels generally contain less blood than usual, the foramen ovale is open, and the ductus arteriosus imperfectly closed. There may be also congestion of the brain, and anæmia of most if not all of the other organs of the body. Collapse of the lung is not, however, necessarily congenital. It may and does occur at all periods of life, doing most mischief at the two extremes. It is a not uncommon complication of all debilitating diseases, and of bronchitis and hooping-cough especially. The pressure of pleuritic effusion, which squeezes the lung against the ribs and vertebral column, packing it in the smallest possible space, and forcing out all the air, causes the same description of carnification: though the result of pleuritis does not come properly under the head of collapsed lung. It is most frequently caused in children by the respiratory powers, or by an obstacle to the breathing found in the lungs themselves. During the course of any prostrating disease, such as infantile remittent, or such as typhoid fever in the adult, when the vital powers are slowly undermined, and the muscular force grows less and less with the progress of the disorder, a person may be absolutely *unable* to breathe. He has not strength enough to draw the air into his chest—the yellow elastic tissue tightens more and more around the pulmonary vesicles, drawing their walls closer and closer, expelling the air for ever from them, and finally killing the patient by suffocation. Or also during the course of bronchitis, accompanied by free secretion, the accident described by Dr. Watson may take place. "Small portions of tough and sticky mucus," he says, "are driven to and fro in the larger air tubes, during the alternate acts of respiration, or in the paroxysms of a cough. Mostly they are expelled by the cough which their presence provokes. But it may happen, and it often does happen, that during respiration, one of these pellets, forced strongly backwards in a tube which gradually becomes smaller and smaller, shuts up that tube and all the smaller branches that proceed from it beyond the place of the obstruction. In expiration the plug moves a little outwards again, so as to allow a part of the imprisoned air to escape; but returning in inspiration, it does not allow any fresh air to enter. Repetitions of this process exhaust, or nearly exhaust, the air from the portion of lung thus mechanically sealed up. The portion of lung so exhausted suffers collapse." (*Prac. of Physic.*)

The symptoms of this species of atelectasis are very similar to those of the congenital form of the affection. The dyspnœa, however, is sudden in its access, and accompanied by a distressing, dry, barking cough, which is generally worse at night than in the daytime. The respiration is very rapid, and the inspiration is longer and more marked than the expiration. The pulsations of the heart are quickened in frequency, and increased in force; so much so, indeed, as sometimes to produce hypertrophy. If the child be stripped, and its thorax examined, its movements present one of the most remarkable symptoms—its cavity, instead of being increased, is in fact diminished during inspiration; the convexities of the ribs are not rotated outwards as they should be, but these bones are drawn inwards and backwards towards the median line, protruding the sternum slightly, and causing a motion said to be diagnostic of this state of the respiratory apparatus. With all this there are evidences of an enfeebled state of the system. Animal heat is not easily generated; nutrition is not well performed. There is generally an irregular condition of the bowels, shown either in a disposition to constipation or in an exhausting diarrhœa. Auscultation and percussion give positive evidence of the existence of this abnormal state of the lungs: for if you apply your ear to the chest, you easily distinguish the absence of the vesicular murmur in the collapsed portion, and percussion gives you the dull flat sound which you know proves the existence of a solid body underneath. If the disease be of long standing, moreover, and if the subject be of a strumous constitution, that malformation may be produced which is known as "pigeon-breast." The atmospheric pressure externally is not counteracted by the presence of the air in the pulmonary vesicles; the ribs yield to the continued force exercised upon them, the sides of the thorax are flattened, the sternum is pushed forwards, and a deformity is created which you will often meet with in the poorer classes of our large cities. I need not dwell upon the pathology of collapse of the lung, as I have also mentioned the post-mortem appearances to you. I will merely add that, in children who have lived for some time, while laboring under this trouble, you are apt to have the pleura thickened, the heart somewhat hypertrophied, especially on the right side, the abdomen tumid, with the venous trunks both external and internal enlarged. Of course, when you make such an autopsy, you will satisfy yourselves of the true nature of the violet-colored patches by inflation, which will cause them to assume their natural appearance.

The diagnosis of this affection is easy. You need not mistake it for any other disease. The only one with which it is likely to be confounded is phthisis, which, while it has points of similarity, is also in many respects different. Phthisis does not appear so early as congenital atelectasis, nor does it advance so rapidly; it has a febrile action too, which is wanting usually in the latter. The suddenness of the dyspnœa in the acquired form, the fact of some other malady preceding it, the extreme debility, and the respiration labored in its character, and accompanied by the lateral *contraction* of the walls of the chest, will plainly announce to you with what you have to deal.

The prognosis is doubtful, and in giving it you will be guided by many circumstances. It depends chiefly upon the amount of lung involved. In children born with an imperfect respiration we may hope by prudent and timely treatment to overcome it; and we may find sometimes that the constitution becomes in a degree familiarized to it, so that the infant may even thrive—an amount of dyspnœa which is distressing to the spectator interfering but slightly with the child's habitual cheerfulness. If the collapse comes on in the course of an exhausting disease, still more enfeebling the patient, or if a plug of tenacious mucus fills up one of the larger divisions of the bronchi, the danger is imminent, and the result very likely to be fatal.

In detailing the treatment of atelectasis allow me to impress upon your minds the necessity of being careful to establish proper respiration in the child at birth; for, if this were more attended to, it is not improbable that fewer cases would be met with. The various stimuli which are unavoidably applied to the infant's skin—the cold air for instance, and the manipulations of the nurse—generally, but not always, effect this for you. If the child be apparently still-born, recourse must be had immediately to artificial respiration, and I know of no prompter, more effectual plan than Marshall Hall's "Ready Method." If, however, the child breathe, but breathe feebly, and the cry be whimpering and weak, we must apply stimulation in the shape of slight taps, sprinkling with cold water, frictions to the back, warm baths, and the other remedies familiar to the obstetrician. Your efforts are so continued, either until you are satisfied with their success or are convinced of their inutility. Failing to establish healthy action of the lungs at birth, you must have recourse to other means, and will pay close attention to the hygienic surroundings of your patient. In the first place, as the warmth of the body is at so low a standard, and continually liable to sink, you will be solicitous not only to envelop the child in warm and soft wrappings, but also to maintain the temperature of the room at 50° or 80°; a warm bath at about 100° will also aid you. The child should not be left in it more than five minutes at a time, and on being taken out should be received in heated flannels. The nutrition of the infant is a point of equal importance with a preservation of its animal heat; for you will remember that generally it is unable to suck, and the effort to do so only exhausts its strength. The mother's milk is, of course, in all cases the best aliment; it may be drawn from the breast, and administered by a spoon; in bad cases a few drops of brandy may be added.

In cases of acquired collapse of the lung you will be guided by the same principles, inasmuch as the disease sometimes arises from the neglect of these very precautions. When your patient has been weaned the diet must be good, plain, and nutritious, meat once a day being allowed, with milk as a beverage, but neither vegetables, pastry, nor fruit. In no disease of childhood can you pay too much attention to hygiene, the very delicacy of the infantile constitution affording you a powerful means of combating morbific influences by placing the subjects of them in fit sanitary circumstances. Having seen that nature is thus brought to your assistance, and a fair opportunity given for her operations, you may then turn to your pharmacopœia, and apply what remedies medicine may yield to you. Among these, stimulants will occupy the first rank. Stimulating liniments—such as camphor or soap liniment—or, more effectual still, turpentine stupes, may be used once or twice a day upon the back and chest; if the case be very bad, ammonia, ether, or brandy in sufficient doses may be given internally, while emetics, by the deep inspirations which accompany the act of vomiting, will help in dilating the unexpanded vesicles, and will clear the bronchi of mucus which may have accumulated in them. A mixture of ipecacuanha with nitre, hyoscyamus, and sulphate of magnesia will answer the triple indication of acting on the skin, the kidneys, and the bowels. As the child improves tonics may advantageously be substituted for stimulants, particularly some of the forms of cinchona; and finally, where there is any disposition to "pigeon-breast," the recumbent position on a firm unyielding surface is to be insisted on. If by these measures you succeed in your object, you will have done a very laudable thing, for you will have saved a life. But in rescuing an infant from one morbid condition you do nothing more, in fact, than put it in a position in which it is liable to others, one of which, in the course of childhood, youth, maturity, or old age, must infallibly destroy life; and before puberty you will meet your most persevering and deadly enemies among the disorders of the respiratory apparatus. Some of them are so fierce in their onset, and so rapid in their progress, as to be utterly beyond your control from the very first; others so insidious in their attack as to escape your observation until your science and care are of no avail: while, as you gain experience, you will also gain the habit of incessant vigilance; for you will discover that accurate knowledge of the earliest and slightest symptoms is an absolute necessity to the medical practitioner. Notwithstanding the delicacy of the mucous membrane in children—a delicacy rendering it extremely apt to take on disease, susceptible to irritating causes—it seems during the first month or two, as far as respiration is concerned, to be limited to the Schneiderian membrane. Acute inflammatory disarrangements of the lungs during this period are comparatively uncommon; while coryza, or inflammation of the lining membrane of the nostrils, is not infrequent. The vitality of very young infants is exceedingly feeble, and their mucous membranes probably not so vascular as they afterwards become, for the same indisposition to acute disease it manifested in the gastro-intestinal system. However this may be, coryza, which, as you know, is a trifling ailment to the adult, sometimes becomes a serious one in the infant. It is known among nurses by the elegant title of "the snuffles," and in the higher walks of society by the more refined name of "nasal catarrh." It is caused by cold taken in washing, or from exposure, from damp air, from the chilling of the extremities by the urine if frequent changing is neglected. Perhaps a predisposing cause is the great transition from the warmth of inter-uterine life to the variable temperature of the outside world; it may also be produced by the heat of too strong a fire, or by the action of the sun, being also a concomitant of some of the exanthemata. In winter and spring it occasionally assumes an epidemic form; then, however, principally affecting children of an advanced age. The disease commences with some degree of fever; the infant is uncomfortable, heavy, and cross; children old enough to express their sensations complain of soreness of the nose, headache in the frontal region, and uneasiness of the back and limbs. There is suffusion and tenderness of the eyes, heat of skin, and in many cases acceleration of the pulse. These symptoms are usually preceded by frequent sneezing, and by a snuffling sound which accompanies breathing through the nose, and which gives to the distemper its vulgar but descriptive name. At first there is a discharge of a thin, acrid mucus from the nostrils, excoriating the upper lip, but which afterwards becomes thick, yellow, or yellowish green, and, it may be, purulent. The lining membrane of the nasal fossæ is tumefied, unusually vascular, and peculiarly irritable; at first dry, but as the disease progresses secreting the yellowish mucus already spoken of. The sense of smell during the first stage is lost. If the flow from the nostrils be profuse, not only great discomfort but also great danger may be the consequence. Respiration through the nose being attended with difficulty, or the nostrils being closed by the combined effects of the swollen membrane and the tenacious mucus, the child becomes unable to suck, of which you may convince yourselves by the simple experiment of imitating this act while pinching your nostrils together. As often as it is presented to the breast it withdraws in despair, expressing by its violent cries the deprivation which it suffers. In such cases the mouth being kept open in order to obtain the necessary supply of air, the dryness of the tongue and fauces aggravates the discomfort. The attack is at its height about the third or fourth day, when the symptoms begin to subside, the feverishness diminishes, the discharge from the nose grows more scanty, the swollen membrane loses its tumefaction, and the patient recovers with a liability to a renewal of the disease with a fresh exposure to cold.

Original Communications.

ON THE USES OF OPIUM,

IN MANAGING THE

SHOCK AND REACTION OF SURGICAL INJURIES.

By EDMUND S. F. ARNOLD, M.D.,

OF YONKERS, N. Y.

(*Concluded from page 232.*)

I now go on to another class of cases where there is but little pain and but small hope of any natural reaction; I mean in those terrible accidents where, perhaps, although no vital part is involved, the injury is nevertheless very severe, and the powers of life have been so lowered by the shock and excessive hæmorrhage that the unfortunate victim of casualty is momentarily threatened with death. What is to be done then? I believe there is sufficient evidence to prove that opium is still our best remedy. Combine it if you will with others, but even without them it will effect more than all of them combined. True, we cannot here avail ourselves of its narcotic or sedative powers, but we may of its stimulant, of its reviving and sustaining properties. In an article on the uses of opium in midwifery (Braithwaite, No. xxi., p. 307) Dr. Lever, after speaking of its acting like a charm, while stimulants are administered with judgment, in the anæmic form of convulsions, associated as they are not unfrequently with large losses of blood; while testifying to its value, when a woman is reduced almost to the last gasp by uterine hæmorrhages, given in full and frequent doses; insists also on its efficacy in cases where the uterus or vagina is lacerated, and says: "I have seen such cases treated by administration of full doses of opium, repeated at varying intervals for several days, and then terminating successfully." "To one woman I was called," he says, "where there was a band in the vagina, the result of a previous delivery; in this case the laceration was so extensive that the hand could be passed into the abdomen. Although the patient appeared to be dying, although the last rites of the church were administered, she rallied, recovered, and is still alive." Now here was all the collapse from the shock of a terrible lesion, superadded to exhaustion by hæmorrhage, as much as occurs in great surgical injuries, yet, so far from narcotizing, full doses of opium rallied and saved the patient. In the case of the boy Whitefield (aged 11), alluded to in a former pamphlet of mine, involving in the left leg a primary amputation below the knee, a fracture of left thigh, compound fracture of both bones of right leg, compound fracture of right great toe, and a severe scalp wound, a teaspoonful of laudanum was given on the first signs of severe pain, and repeated as often as recurrence of the same rendered it necessary—on an average about twice in the twenty-four hours—for several days, and he went through the period of reaction with as little suffering or excitement as occurs after any simple case of fracture, his pulse hardly once rising above 100. True, I gave it only with the idea of allaying pain, believing that the boy would certainly die; but it has appeared to me since, from manifold evidences, that it was because the right remedy was employed at the right time that success was achieved.

I believe that it is precisely during collapse, or where reaction is just setting in, that in the hands of the surgeon the virtues of opium are most conspicuously available. Whether that condition be induced by any of the ordinary accidents of life, by wounds on the battle-field, by the shock of severe surgical operations, by free or too copious venesection, or in obstetric practice by severe hæmorrhage—for in all these the system is brought down to or below the starting point of reaction—it will, as we have seen, by its nicely blended stimulant and sedative qualities rouse the nervous energies, restore the pulse, free the capillary circulation, then control abnormal action, soothe pain, allay constitutional irritation, and prevent inflammation. This beneficent action covers not only the most important period of time in the history of the case, but will materially influence the whole after progress of it.

I speak of the phenomena of shock and reaction as being similar in essentials in all cases, as marking a condition *per se*, and as differing only in intensity or duration proportioned to the severity of the injury causing them. The shock in all cases a morbid impression made on the organic nervous system, temporarily so depressing it as to paralyse its functions, and with them the vital actions dependent upon its healthy influence, thereby extending its effects to the entire system. Reaction, the recoil or rebound from this state, whereby action is not only restored but passes beyond healthy bounds, and in proportion to the previously unnatural depression becomes unduly exalted, as manifested by fever and constitutional irritation. In proportion, then, as we can succeed in lifting the patient over the shock and in keeping down the reaction within healthy limits, in other words, as we can succeed in restoring and maintaining the tone of the organic nervous system, will the dangerous consequences of reaction be avoided, and the reparative processes be carried on in a healthful manner, the system becoming daily less sensitive and more reconciled to its altered condition, until in a few days all primary dangers are past. Let, on the other hand, the reaction go on unchecked to a certain point, and pain and inflammation and constitutional irritation will set in. The local excitement or activity, which in moderation favors and promotes reparation, when carried to excess becomes disorganizing and destructive, threatening loss of limb, and if a vital organ is involved, loss of life. Again, as reaction advances we seem proportionately to lose the benefit of our sheet-anchor, opium, inasmuch as vigor is restored the dangers of over-stimulation and narcotism are increased by its free use. We must look for sedatives, then, elsewhere than in opium, at all events as a main remedy, though in conjunction with others its occasional exhibition will be frequently useful.

Considering that in the shock of an injury we have a morbid depression of the organic nervous system paralysing the very mainsprings of vital action, and consequently of reparative action, and that until the tone of the organic nervous system is restored and its healthy influence re-established, reaction, or renewed vital manifestations, will be irregular and tumultuous and inefficient for healthy reparation (hence the great value of opium at once as a nervous stimulant, and as an equalizer of nervous and arterial action); I believe that when the organic nervous system has recovered its normal status the general equilibrium of the vital forces will be restored, and the system placed in the best possible state for the exertion of reparative efforts; that by the time the equilibrium is restored the system will have become accustomed to and tolerant of the morbid impression, and that the worst dangers of reaction will have passed, not to return. I am further led by the evidence above afforded to the following conclusions:—

1st. That when by the shock of a severe injury, especially if accompanied by excessive hæmorrhage, the powers of life are reduced to the lowest ebb, the patient may frequently be rallied, when all other remedies are of no avail, by the stimulating and reviving powers of opium, administered at short intervals in moderately full doses of from one to two grains, or of laudanum in drachm doses or more.

2d. That the state of nervous exhaustion and exsanguine condition of the system establish a full tolerance of the drug in proportion to their extent.

3d. That in proportion as the vital powers are less reduced the administration of opium during the shock becomes unnecessary, and will be fraught with more danger, and that it will be proper, therefore, to rely in part or wholly on other measures in ordinary use, such as warmth, friction, diffusible stimuli, etc., according to the circumstances of the case.

4th. That where reaction is indicated by returning sensation and pain, opium is an invaluable agent for controlling it and preventing its excess, regard being had to the conditions under which a tolerance of it is established.

5th. That when by general prostration induced by the severity of the injury, or by previous hæmorrhage, or by venesection, tolerance of opium has been established, the allaying of pain may serve as a guide as to the extent to which it shall be given, and that it may then be safely carried to any extent necessary to accomplish that result, inasmuch as by its effect on the sensitive nervous system we are able to estimate and gauge its influence on the organic; and further, that the system should be kept under its influence until the reactionary dangers are past, by re-administering it as often as the recurrence of severe pain renders it necessary.

6th. That by its powers of rallying and supporting the nervous energy, allaying irritation, freeing and equalizing the circulation, and keeping it within bounds, the system is placed in the best possible state for the exertion of the reparative process.

7th. That as soon as this has been established in a healthy manner the opiate may be gradually withdrawn, and the case treated on general and established principles according to the phases it may assume.

8th. That in proportion as reaction has advanced, and inflammation and constitutional irritation have set in, the free use of opium will be contra-indicated, unless the inflammation be previously removed by bleeding.

It may be a question as to how far the above will apply in cases of injury of the brain. If the dangers of narcotism are in an inverse ratio to the extent of the vital depression, and if opium really possess the property of freeing the capillary system as well as equalizing and controlling the general circulation, then I see no reason why it should not operate as favorably in brain lesions as in any other class of cases.

In conclusion, if the question I asked at the commencement of this article can be determined, as I trust and as there is reason to think it may, great would be the advantage to patient and medical attendant alike. Not only would the safety of many a one now lost after great and exhausting operations be secured, not only might the energies of the almost expiring victim of the battle-field or railroad track, wherever indeed we have organized help, be rallied and sustained until other measures could be taken for his relief, but we should be enabled to step forward in cases of casualty where the miseries of a lifetime appear to be crowded into a few short hours of agony, and adopt bold measures, calculated as much to avert future dangers as to allay present suffering; moreover, by the prevention of such dangers it would often be placed in the power of any practitioner of ordinary judgment and ability, though perhaps of limited experience, to command success in cases which now tax in vain the skill and ingenuity, indeed all the resources of the most accomplished practical surgeons.

NOTES ON MEDICAL JURISPRUDENCE.

By THOMAS C. FINNELL, M.D.,

OF NEW YORK.

II. POST-MORTEM EXAMINATIONS.

In conducting post-mortem examinations the question will naturally arise as to whether the investigation is required for the purpose of clearing up some obscure pathological condition, or whether it is needed as medical testimony to be placed before a court and jury. In the former case we proceed at once to inspect that portion of the body which, during the lifetime of the individual, was the seat of supposed morbid processes. With their discovery and the evidences of congestion, inflammation, or the products of these processes, all our interest in the affair ceases; except it be comparing the changes observed with the symptoms during life. Should the autopsy, however, be required for medico-legal purposes, it will be necessary to pursue a very different course. And first, let it be clearly understood who is to conduct the investigation. This is a matter of some importance, and should not be passed over lightly, for it frequently happens that several medical gentlemen are invited to be present at the examination, and as a matter of courtesy, they are requested to lend such assistance as the case may demand. This often leads to confusion, and sometimes to unpleasant misunderstandings, all of which could be easily avoided by a proper arrangement at the onset. We are of opinion that all the details connected with the autopsy should be intrusted to one person who should act as principal, and be held responsible for a written history of all the particulars. It is an easy matter for him to assign portions of the labor to any gentleman present, with the understanding that as each part is exposed it shall be examined and inspected by all present. By adopting this plan a full opportunity will be afforded to all present to form their own opinion of such pathological changes as may be discovered. On the other hand, when the autopsy is conducted by several gentlemen, each investigating a part for himself, it is evident that he feels but little interest in closely observing such changes as are discovered by his neighbor; doing his own part well, he leaves the others to follow the same example. The result is, an imperfect and unsatisfactory history is obtained, leaving a wide scope for differences of opinion in relation to the true cause of death. What is congestion to one is normal to another; and so with the evidences of inflammation, some seeing its traces very distinctly, while others fail to discover any proof of its existence. It is almost unnecessary to state that alterations in color, texture, and consistency, often require an experienced eye to determine their existence. In presenting this matter to your readers we may appear to dwell on points of trifling importance, and yet they are far from being so, when subjected to the test of daily experience. The details of a post-mortem examination are apparently very simple, until the attempt is made to carry them out; many difficulties are then experienced which might easily be avoided by a little forethought and good management. We are advised, in the performance of surgical operations, never to commence without having all our instruments prepared and in good order, as any neglect on this point might seriously affect the success of the operation; yet how often do we see autopsies undertaken with but little regard to the necessary implements; examples are no doubt familiar to your readers where, at the close of the examination, it was difficult and almost impossible to find a needle, an instrument at this stage of the proceeding of great value.

All authorities on medical jurisprudence insist on the importance of a careful inspection of the surface of the body as the first step in our investigation. A neglect of this simple rule is often attended with much annoyance to the medical witness who, on being interrogated as to the presence of bruises on the back, is often obliged to confess, "I did not examine it with care." We should constantly bear in mind that the slightest alteration in color, consistency, or change of texture, should be carefully noted down without reference to their bearing on the immediate cause of death. Appearances which may seem entirely satisfactory to our minds in explaining the direct cause of death may, when examined more closely by others, place the whole affair in a different light.

A mistake that is commonly made by those unaccustomed to post-mortem examinations, is a hasty conclusion that internal organic disease, whenever found, is the true cause of death. Such, however, is far from being the case, as these discovered lesions may have existed for many years, and caused the individual little or no trouble. How far they contributed to hasten the death of the party, will be a question for discussion when the appearances presented are compared with the symptoms at the close of life. It often happens that no history can be obtained of the condition of the person while living; we are then obliged to base our opinion on the cause of death from pathological changes of vital organs which are discovered at the time.

While the immediate cause of death may really be due to conditions of which we have no knowledge, the popular belief is, that an autopsy always will determine the true manner and cause of death, and it not unfrequently happens that medical practitioners are led to adopt the same opinion. The truth, however, is, that death may take place suddenly in persons of all ages and conditions of life, without leaving any evidence of pathological changes disagreeable to the eye of the pathologist, the microscopist, or the chemist.

Indeed, instances are not uncommon where the symptoms during life pointed to a particular organ as being involved; while the autopsy fails to discover the least change in texture, color, or consistence, that would explain the immediate cause of death.

Our purpose, however, is to call attention to the manner of conducting these investigations, and pointing out a few simple rules which may guide those who have not had much experience in these matters.

First. Carefully inspect the whole surface of the body, and note it down at the time.

Second. Determine which of the three cavities is to be opened first, the head, thorax, or abdomen.

Third. Place the cadaver on a high table, in order to prevent the stooping posture.

Fourth. Have plenty of light, one knife strong and sharp, a good saw, a triangular needle, three inches long, some cord, and a large sponge.

Fifth. Take full notes of all morbid conditions that are discovered: particularize organs that are healthy as well as those that are diseased.

It will be necessary to observe the above simple rules in all cases that come under our notice, whether death is caused by suffocation, drowning, poison, gunshot wounds, internal disease, etc., etc., etc.

A NEW APPLIANCE FOR
THE TREATMENT OF
COMPOUND FRACTURES OF OS FEMORIS.

By JNO. T. HODGEN, Surg. Vols.,

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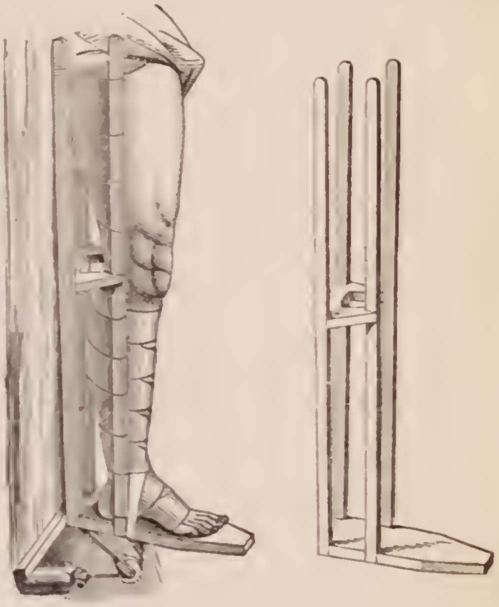
Having experienced great difficulty in dressing compound fractures of the femur when the wound was on the posterior part of the limb, I at length devised the apparatus (the application of which is described) to meet this difficulty.



The woodcuts show the construction of the cradle, so that I need only give the measurements and mode of application.

The foot-board is four inches and a half wide, one inch thick, and fourteen inches high (or long), supported on a base fifteen inches long and one inch square. The centre support is seven inches high, eight inches on the base, and one inch thick. The uprights of this portion are one inch wide at the top, and one inch and a half wide at the base; this piece is placed twenty-one inches from the foot-board.

The longitudinal strips are forty-two inches long, one inch and a quarter wide, and half an inch thick; one end of each of the four is fastened by screws to the foot-piece, two at the base, the remaining two above them, leaving spaces of four and a half inches between the lower and upper pieces. The lower strips are fastened to the outside of the centre support at its base, the upper at the inner side of the upright portion, thus forming the frame represented in the cut.

This may be adapted to either limb by binding the ends of the pieces designed for the perineum and pubes, the lower one from above, and the upper from below, and shortening them so that the foot will come near the foot-board—the upper strip passing in front of the pubes and the lower a short distance from the perineum.

Strips of cotton or linen cloth two and a half inches wide are now placed on the upper longitudinal bars, and pinned, so that they form a double inclined plane on which the limb may rest. These suspension strips are placed in contact with each other, and, being distinct, any one may be removed and replaced to insure cleanliness, when necessary, without disturbing the limb.

The limb is then prepared by placing broad strips of adhesive plaster on either side of the leg, and securing them in the usual manner by a roller. It is then placed on the suspension strips, and the free ends of the adhesive plasters placed around the foot-board and secured to it. A strong cord is fastened to the middle of the foot-board at a proper height, and passed over a pulley which is to be screwed into the foot-board of the bedstead. A bag containing from five to twenty pounds of sand is attached to the cord, and this weight serves as an extending force. Two or more bricks are placed under each of the legs of the bedstead at the foot, thus elevating it four or six inches, and allowing the weight of the body to serve as the counter-extending force. Thus the limb is suspended so that the air circulates freely under and about it.

Since April, 1862, I have treated a number of patients, using this cradle, and find it simple and easy in its application, keeping perfect extension, never producing ulceration of the heel or excoriation of the perineum, allowing the use of the bed-pan without difficulty or danger of displacing the fracture. In compound fractures the wound may be dressed and kept clean without disturbing the limb; the part is always exposed, so that the surgeon may detect any displacement without disturbing the patient, and correct it without a complete undressing. It leaves the circulation free, and thus allows the process of repair to go on more rapidly than if the circulation was impeded by bandages.

Reports of Hospitals.

BELLEVUE HOSPITAL.

ANCHYLOSIS OF KNEE-JOINT.

TENOTOMY.—MOVABLE JOINT.

By DR. SAYRE.

[Reported by W. F. Peck, Senior Assistant to First Surgical Division.]

Elizabeth Prinder, æt. 32, native of Vermont, single, and by occupation a seamstress. She states that when seventeen years old she was attacked with a severe lancinating pain in the left knee, accompanying which there was considerable swelling, but without an undue amount of heat. These symptoms continued without any serious impairment of her general health more or less for three years, when they gradually disappeared. She was treated with cupping, blisters, and a double inclined plane which confined her limb in an almost rectangular position. When the splint was removed the hamstring muscles were found to be permanently contracted, so much so that when she stood erect the leg was at a right angle with the thigh. She was admitted into the hospital, January 28, 1863, when the following was recorded:—General health excellent, well formed, and muscular system well developed save in the deformed member. The left leg is flexed at a right angle, and the hamstring tendons permanently contracted; patella adherent by bony adhesions to the outer condyle of the femur. There is moderate absorption of the outer articulating surface of the femur, in consequence of which the inner border of the foot, when placed on the floor, touches first. No pain, and complains of nothing save the deformity.

Dr. Sayre operated upon her on the day of her admission before the class, by forcibly breaking off the patella attachments and then subcutaneously dividing the contracted tendons. This being accomplished an extra amount of force succeeded in extending the diseased leg on a line parallel with its fellow. The wounds made by the tenotomy knife were treated as usual; immediately closed with adhesive plaster.

The limb was then enveloped in cotton, with a sponge in the popliteal space, and a compress about six inches in length placed over the course of the femoral artery so as to partly arrest the supply of blood to the joint, and placed in an instrument devised for the purpose.

The instrument consists of a shaft on both sides of the leg, extending from the malleoli up to the middle third of the thigh, with a ratchet-wheel at the knee for the purpose of practising passive motion, which is done by means of a key. The bars of steel are retained in position by means of four circular bands of padded leather straps. The leg being placed in the instrument it was retained by a firm compress over the patella, and the compress secured by rollers. Irrigation of cold water to knee and, S. s. morphine, U. S., ℥j., to allay pain.

Jan. 29.—Somewhat exhausted; pulse and respirations normal. Had some pain in knee during the night; very little this morning; no appetite; bowels constipated. On Feb. 5th the leg was placed in a fracture-box so as to give support to the foot. On the 7th the apparatus was removed. No synovitis has followed the operation. There is, however, some ulceration over the patella, produced by the firm pressure made when the instrument was applied. The joint admits of motion, though very little is permitted. She has no pain except that which the ulcer produces. The instrument was left off, and a lateral leather splint extending from just above the internal malleolus up to within three inches of the attachment of the gracilis. Ulcer over patella dressed with simple cerate. Functions well performed. She has not experieuced any pain or uneasiness above the joint. The leather was removed, the instrument applied, and passive motion made. On the 16th the dressings removed, and passive motiou again made; ten inches' motion at the foot; no evidence of inflammation in or above the joint; ulcer over patella closed. The leather is to be removed at night, and extension by means of a weight and pulley kept up for the purpose of guardiug against the tendency to flexion. March 24.—Passive motion has been practised every morning since last record. She now has fourteen inches' motion at the foot, and walks about with the aid of one crutch; patella movable. May 4.—The instrument has been applied daily, and she now has eighteen inches' motion at the foot; walks with the aid of a cane. The long leather splint is to be entirely removed, and a piece of leather five inches wide and twelve inches long is to be applied behind the knee, to give support in walking. She has a moderate amount of voluntary extension, though it is limited.

Returned to her home, Auburn, N. Y., the day following.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, Dec. 10, 1862.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

OPERATION FOR HERNIA, REMOVAL OF HYPERTROPHIED OMENTUM.

Dr. Little presented a specimen of hypertrophied omentum weighing five and a half ounces, which he had removed in an operation for strangulated hernia. He gave the following history:—William Murphy, an Irishman, 33 years of age, patient, has suffered from inguinal hernia of the right side for many years. Until three years ago, the hernia was entirely reducible; since that time, a portion has been irreducible. Patient has been in the habit of wearing a *truss*, for the purpose of preventing the reducible portion from coming down. Several times the hernia has become strangulated, but it has always been reduced by taxis: twice at the Bellevue Hospital, and several times at his own house. Last Friday, Dec. 5th, it again became strangulated. A doctor was called in, who, failing to reduce it, advised an operation. To this the patient would not consent. Yesterday, Dec. 9th, Dr. Hadden was sent for at the North-Eastern Dispensary, aud I accompanied him to see the patient, whom we found suffering from the following symptoms:—Constant vomiting of stercoraceous matter, pain in the abdomen, no movement from the bowels *for six days*. Pulse 120. The hernial tumor was about the size of my two fists, swollen and œdematous, tender on pressure, with some redness over its surface, dull on percussion. The abdomen was moderately distended, tympanitic and tender on pressure, the tenderness being more marked in the vicinity of the tumor. This condition of things led me to advise that an operation be performed at once, to which Dr. Hadden agreed, and kindly allowed me to operate. Dr. Brush administered ether, and Dr. Hadden, and Dr. Roby, House-Surgeon of the Soldiers' Home, assisted me during the operation.

The coverings of the hernia were carefully divided down to the sac. On making a small opening into the sac about an ounce of clear serum made its escape. The sac, which was very much thickened, was then carefully opened, and it was found to contain a large pedunculated mass, at the lower end of which there was attached a small portion of healthy-looking omentum, the other extremity whereof was attached to the sac by a strong adhesion. The mass was intensely congested, being severed with swollen veins of considerable size, resembling a varicocele. The finger could readily be passed upwards alongside this mass through the abdominal ring into the cavity of the abdomen; on pulling down an additional portiou, it was found to be connected with the omentum, and it was, therefore, supposed to be hypertrophied or thickened omentum—that portion which had been irreducible for many years, and over which he had worn a truss. A strong ligature was tied around it as high up as possible, and it was cut off. This mass weighed five and a half ounces. The remaining portion was pushed back just within the abdomen, the ligature being allowed to pass out of the external wound, which was then closed by a few sutures, and cold water dressings applied.

The patient passed a quiet night, and at four o'clock this morning, twelve hours after the operation, he had a movement from his bowels for the first time in six days, during which time he had taken several purgatives and enemata without any effect. At ten o'clock this morning a warm water injection was administered, which was followed by a very free evacuation from his bowels. No vomiting occurred after the operation. The patient's abdomen is still tympanitic, with considerable tenderness on pressure. Pulse 120. This A.M. there was considerable swelling about the wound, and several sutures were removed in the part most depending to facilitate the discharge of any matter that may accumulate. At three o'clock this afternoon he had another movement from his bowels. He is under the use of moderate doses of opium, and warm flaxseed poultices are kept constantly applied to his abdomen.

The subsequent history of this case is as follows:—Dec. 11th—ten A.M. Pulse 136. Respiration 18. Tenderness more severe in the vicinity of wound. The remaining sutures were removed, the parts about the wound being found considerably swollen. Patient takes one grain of opium every two hours. Ten drops of veratrum viride were given, and repeated in an hour. Six leeches were applied over the abdomen in the vicinity of the wound. At five P.M. pulse 120. Bowels moved. No vomiting since the operation. Continued opium one grain every two hours. Dec. 12th—eleven A.M. Patient under the influence of opium. Respiration ten in a minute. Pupils contracted. Pulse 110. Tympanitis seems to be increasing. The wound looks well. Patient complains of pain over the abdomen, and a blister applied. Dec. 13th—Pulse 106. Respiration 14. Enema given, and followed by a discharge of *fæces*, and large quantities of *flatus*. Tenderness over abdomen diminishing. Patient has a severe cough with pneumonic sputa, which troubles him very much. Ordered cough mixture, containing hydrocyanic acid. Opium to be discontinued. In the evening patient was much improved, cough having abated. Ordered beef-tea.

From this time patient continued to improve. Twenty days after the operation the ligature came away. On the ninth and tenth days patient had a chill, which was followed by profuse sweating, which, pointing towards pyæmia, caused some little anxiety. The chills, however, did not recur, and patient gradually improved, and in eight weeks after the operation he called on me with the wound entirely healed.

Dr. Post presented a sequestrum removed from a patient four years of age, the disease having existed for two years. The specimen was interesting in connexion with the age of the patient from whom it was taken. Dr. Post had never seen a similar case before.

Dr. Voss remarked that he had then under treatment a child not over ten months old, in whom there was necrosis of the middle of the tibia. He proposed to operate upon it in the course of a few days.

COMPOUND COMMINUTED FRACTURE OF FEMUR—EXSECTION.

Dr. Merritt presented portions of bone which he had excised from the thigh of a patient who had received a minié ball wound.

A private, aged 22 years, of the New Jersey Volunteers, was wounded in the battle of Chickahominy on the twenty-seventh of June last, by a minié bullet, which produced a compound comminuted fracture of left thigh. After the receipt of injury he was subjected to the well known hardships, ill treatment, and rough transportation consequent upon the falling into the hands of the enemy and conveyance to Richmond. He stated that no surgical treatment had been applied to his wound, except the cold water dressings. He was admitted into the Hospital "Euterpe" on the sixth of August, and presented the following conditions:—There was a compound comminuted fracture of the femur located within the limits of the middle third of the thigh. The point of entrance of the bullet was at the anterior limit of outer aspect of thigh, about equidistant from the prominences of trochanter major and external condyle of os femoris, and the point of exit was at the inner limit of the anterior aspect of thigh, in a directly transverse course from the point of entrance, and these points were three and a quarter inches distant from each other. There was great mobility at the seat of fracture, and moderate swelling of the limb. The opening caused by the exit of the bullet was closed, but the opening of entrance was patulous, and discharged profusely a fetid ill formed pus, mixed with grumous clots of blood. Explorations through the orifice of entrance of bullet with the finger and probe detected the presence of several fragments of bone of considerable size, apparently attached and not readily moved. The surrounding tisues were not much disorganized, so far as reached. The general physical condition of the patient was fair, and his morale excellent, when considering the character of injury, the circumstances of the severe ordeal through which he had passed, and the interval of forty days since the receipt of injury. It was his firm determination not to suffer amputation, but he earnestly entreated to have the "loose bones taken out." I accordingly decided to perform the operation of exsection, which I proceeded to do on the tenth of August. After etherizing the patient a straight incision five and a half inches in length was made in the outer aspect of thigh, opposite the seat of fracture. When the bone was reached there were first encountered the overlapping upper end of the lower fragment, which was obliquely split in the axis of the shaft downwards about three inches, and a large piece of bone, apparently belonging to the end of upper fragment, which was loosely attached to soft tissues surrounding it. This was removed, and then the end of lower fragment could be protruded through the incision, so as to allow a chain saw to be easily passed around it, and three and a quarter inches to be excised. After doing this the complete extent of the injury was manifest, for the two large portions of bone, now removed, had before occluded the extensive comminution of the bone, which was found to exist at the inner aspect of the shaft. A large number of pieces of bone loosely attached were now removed, and finally the lower end of the upper fragment, which was also found to be split obliquely to the extent of two inches, was excised with the chain saw, so that five and a quarter inches of the shaft were removed, which was comminuted to the amount of twenty-eight pieces of bone, all of which were of considerable size. The patient died six hours after operation. The points of pathological interest in this case appear to me to be the following:—First, the extensive comminution of the bone when considering the course of the bullets. Second, the favorable condition of the patient forty-four days after receipt of injury, when considering also the ordeal he had passed through; and third, the orifice of exit of bullet, which being in more direct communication with the comminuted fragments, should have healed, and thus explorations through the orifice of entrance would not detect the entire extent of injury; and finally, the local appearances and conditions were so slightly indicative of such an extensive injury.

SPECIMENS OF GUNSHOT WOUNDS.

Dr. Conant presented several specimens of gunshot wounds of bones. The first was a portion of the upper part of the tibia, removed by amputation from a member of the 13th Mississippi regiment. The wound was inflicted at the battle of Antietam, the ball entering the cancellated structure of the head of the tibia, through the ligamentum patellæ, and penetrating the joint. The patient was seen on the Monday following the day of the battle (Wednesday) by Dr. Conant, who, contrary to the opinion of several Confederate surgeons present, thought that the joint was injured. After considerable subsequent consultation all the surgeons consented to the performance of amputation, which proved the correctness of the diagnosis.

The second specimen was the upper portion of the os brachii, removed by shoulder-joint amputation from a member of one of the Louisiana regiments, who had been wounded in three places in the left arm, one through the wrist-joint, one through the elbow-joint, and one through the shaft of the os brachii immediately below the head of the bone. The patient being in a very low condition at the time Dr. Conant saw him, the axillary artery was first tied. The operation was then proceeded with in the usual way.

The third specimen consisted of portions of the humerus removed by exsection from the arm of a member of the 8th Georgia regiment. The ball entered about two inches below the shoulder-joint, shattering it very extensively. It was thought best to have amputation at the shoulder-joint performed, but Dr. Conant, finding the artery uninjured, proposed exsection of the joint. The consent of the Confederate surgeons being obtained for such a procedure the splinters of bone were removed, and a line of fracture being found through into the joint, the head of the bone was removed, as also a portion of the shaft consisting of the end of the distal fragment. About one-half of the os brachii was thus removed. The patient made a good recovery. The expectation was that the patient would be able to use his fingers, and have some motion of his forearm.

Dr. Krackowizer referred to a case in which he had exsected four inches of the os brachii, including the head of the bone, with an excellent result. **Dr. Conant** lastly narrated the following case of wound of the femoral artery from a minié ball. The missile entered the fleshy part of the thigh at its internal aspect, wounding the artery at or near the situation of its entrance into the femoral sheath. A tourniquet had been applied from Wednesday until Sunday, when Dr. Conant ligated the vessel. In the course of four or five days secondary hæmorrhage came from the original wound, i.e. from the place of entrance of the bullet. Dr. Clark of Boston, who was present at that time, proposed ligation of the external iliac, which he proceeded to do ten days after Dr. Conant left; the patient, however, survived the operation only twenty-four hours. The question arose in Dr. Conant's mind—Whether it would not have been better to have amputated the thigh at once when hæmorrhage recurred?

Dr. Post was inclined to favor a ligation of the femoral at first, as was done by Dr. Conant, and if that failed, to control the hæmorrhage to amputation.

Dr. Krackowizer concurred in that opinion.

Dr. Post in that connexion related the following case which occurred in the practice of Dr. Mott some years ago in the N.Y. Hospital. Dr. Post was house-surgeon to the institution at the time. A patient was operated upon for wound of the tibial artery by ligature of that vessel; secondary hæmorrhage occurring, and continuing at longer or shorter intervals, the femoral and external iliac were then successively ligated, when finally it was proposed to tie the primitive iliac. While the consultation was being held to determine that point, hæmorrhage occurred to such an extent that the idea of operating was abandoned. The patient, however, rallied from the threatened collapse, and two weeks subsequently was able to elope from the hospital.

American Medical Times.

SATURDAY, MAY 23, 1863.

THE MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

The approaching meeting of the American Medical Association must be regarded with unusual interest. Under any circumstances the gathering of the representatives of the medical profession of the United States in council must be viewed in the light of no ordinary event. During the twelve years of its active existence every meeting of the Association exerted a most powerful influence upon the character of American medicine. In localities where these meetings were held a new and upward impulse was given to the profession; communities were most favorably impressed with the assembled delegations, and with the dignified sessions of that body. The resident members received a new stimulus; and their position, socially as well as professionally, was rendered more worthy the high character of their calling.

The Association also improved the tone of the profession at large by the adoption and enforcement of many salutary regulations. The code of ethics, a system of medical morals which embraces the wisest maxims of the past and the most ennobling sentiments of the present, has bound in one fraternity all ranks and classes of the profession. It is the constitution of the republic of medicine, to which every one, however exalted or however humble, must conform. Medical education was made the subject of constant discussion, and the schools were forced to adopt many reforms, which have already given a more thoroughly educated class of graduates. A large number of questions of an ethical and scientific nature have been so far settled as to give a permanent direction to professional conduct and to investigation and observation. The systematic study of the climatology and diseases of the United States, which had been carried on with so much zeal, and the accumulation of these valuable reports in the annual transactions, promised most important results. By other means, and by multitudinous influences, the Association was elevating the standard of the profession. It was in the full tide of success when its sessions were discontinued in consequence of the universal preoccupation of the medical mind with our national affairs.

On renewing its annual sessions, we trust that the Association will not in the least depart from its former settled policy of discussing freely every subject which affects the welfare of the profession. It should stamp, as in the past, with the seal of its approbation whatever will advance and ennoble American medicine, and condemn by positive enactments every unworthy and unprofessional measure. Let it continue to be the National Medical Congress, whose statutes are binding upon every member alike. Vast interests are still committed to its care, which it must wisely manage if it fulfils its mission. Medical education, the very basis of all professional excellence, is to be regulated only by the Association. It is vain to anticipate any independent movement on the part of the schools. They will never voluntarily require a proper primary education and institute a preliminary examination to determine whether the student is qualified to enter upon his studies. They will never lengthen the term of study, or give greater breadth and scope to the course of instruction, without the propulsion of the profession acting in its organized capacity. The Association should not fail to maintain its jurisdiction in all matters pertaining to medical education. Let it reassert the propositions which it adopted at its last session, and enforce compliance with them. The Association should encourage local societies, especially state and county medical organizations. On the integrity and activity of the latter depend the power and the widely extended influence of the former. It should regulate in a certain degree our medical literature, by encouraging the preparation of original works, and discourage the republication of ordinary inferior treatises. The propriety of an international copyright should be discussed by the Association in its bearings upon our literature. It should prosecute with renewed energy the investigations into the climate, epidemics, and endemics of the country, which have already yielded important conclusions.

To the subjects above mentioned, which must occupy the attention of the Association, we have to add, finally, those which grow out of the relations of the profession to the army and navy, and the great national struggle which is now in progress. During the present war the Association has contributed powerfully to sustain the national cause. Its members have been called to fill responsible positions in the army and navy, and we recognise them in every department of the public service, from the Surgeon-General to the humblest physician in the most distant hospital. In the reunion which is about to take place, the army and navy should be well represented. The Association may thus be made subservient to that cordial relation which should ever exist between the profession in the public service and in civil life. The medical department of the army, in its new organization, is a powerful auxiliary to the Association in maintaining the high position of legitimate medicine in this country, and deserves its cordial endorsement and support. Every species of charlatanism is carefully excluded from the public medical service, and the utmost encouragement is given to high professional qualification. The questions for scientific inquiry which the war will suggest are innumerable, and should lead to the formation of a sufficient number of committees to cover the whole field. Of these, that which relates to recruiting should not be lost sight of by civil practitioners, who now have an opportunity to study this subject to great advantage.

We have thus briefly alluded to the past history of the Association, its present position, and its future mission, and the subjects that may engage its sessions, to remind members, and especially delegates, of their duties and obligations to this great central society. It is of vital importance that this Association be maintained on its original basis, and that no irrelevant issues be raised which shall weaken its organization. Loyalty to a rightfully constituted Government is the duty of the citizen of every rank and grade, and should be affirmed by a body representing the most loyal, patriotic, and influential profession in the country; and the same sentiment should govern it at this time in the selection of its officers for the ensuing year.

THE WEEK.

We have before alluded to the necessity of an organization in this city for supplying poor maimed persons with surgical appliances gratuitously. This class of the poor is very large. There are many who are rendered helpless for life by their inability to purchase the requisite instruments to remedy their disabilities, who, if supplied, might become self-supporting. Certain disabilities, as hernia, are entirely disregarded until they become formidable affections, which the existence of such a society would tend to prevent. In London there are several organizations of this kind, which are effecting a vast amount of good. One Society alone relieved more than 163,000 cases of rupture by the application of trusses.

We are very glad to hear that the *Association for the Relief of the Poor* of this city has taken up the subject, and organized the *New York Society for the Relief of the Ruptured and Crippled.* It is under the direction of the Association; and if its daily details are conducted by competent persons, it will become a powerful auxiliary to this excellent Charity in the relief of the poor. The office is located at 97 Second Avenue, and the medical officers are—Resident Physician and Surgeon, James Knight, M.D. Consulting Surgeons: Drs. Mott, Van Buren, Parker, and Carnochan.

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A Catalogue of the Army Medical Museum, at Washington, has recently been issued, prepared by Dr. J. H. Brenton, Curator, and Dr. Wm. Moss, Assistant Curator, from which it appears that on January 1, 1863, the collection comprised 1,349 objects. Of these 985 were surgical specimens, 106 were medical, 5,133 were missiles which have for the most part been extracted from the body. The latter class includes round and conical bullets, shot, grape, canister, fragments of shell, arrows, arrow-heads, etc. This catalogue is but a numerical list of the objects thus far collected. The work of classification and detailed description will be the labor of time, and will fill volumes if put on record. The establishment of this great Army Medical Museum is one of the noblest enterprises to utilize the results of the present war, and render its sad lessons instructive and useful to future generations, which has yet been undertaken. It will remain an enduring monument to the enlightened zeal and energy of Surgeon-General Hammond, and all associated with him in laying its present broad foundations. Every surgeon connected with the army or with its hospitals, should carefully preserve all pathological specimens, and forward them with accurate histories to the Curator. The name of each contributor appears in the catalogue in connexion with the specimen.

Army Medical Intelligence.

REPORTS ON THE USE OF BROMIDE IN HOSPITAL GANGRENE, ETC.

WASHINGTON, D.C., April 16, 1863.

I have the honor to report that I left Washington city on Saturday, 28th ult., in obedience to the following order:

SURGEON-GENERAL'S OFFICE,
WASHINGTON, D.C., March 23, 1863.

Surgeon J. H. Brinton, U.S.V., will proceed without delay to Louisville, Ky. He will visit the different U.S.A. hospitals in that city, and investigate the character of the Hospital Gangrene, Pyæmia, and Erysipelas alleged to be there prevailing. He will inquire into the different modes of treatment employed, and report as to their efficiency. If he deems it advisable, he will proceed to Nashville under the same general instructions. Having fulfilled these orders he will return to this city, and resume his duties in this office.

By order of the Surgeon-General,
Jos. R. SMITH,
Surgeon U.S.A.

On my arrival in Louisville I called on Surgeon M. Goldsmith, U.S.V., the Medical Director of the Louisville Hospitals. In company with him I visited the principal military hospitals in the city and vicinity, and carefully examined the various cases of hospital gangrene and erysipelas therein contained. The type of the former affection at the period of my visit was somewhat similar to that which I had previously observed in the U.S.A. General Hospitals at Annapolis, but although of analogous form the disease did not appear to me to be of so virulent a grade; whether this was due to the original character of the affection, or to the effect of the remedial measures employed, I am not prepared properly to decide. Nearly all the cases observed by me were in the stage of reparation, and but very few in the period of progress. The shape of the ulcers was characteristic, as was also the appearance of the grey slough, but the tendency of the sores to burrow deeply, and to extend rapidly, was not well marked at the time I examined the cases, some thirty in number.

The treatment almost universally adopted in the Louisville hospitals is that originated and introduced by Surgeon Goldsmith, U.S.V. It consists in the direct local application of bromine, either pure or in solution, to the surfaces of the sloughing sore. Due care is always taken first to remove as thoroughly as possible the sloughs, so that the agent may act on the living tissues, and permeate them to some extent. In cases in which the burrowing is so extensive and deep-seated as to render the application of bromine difficult or incomplete, Dr. Goldsmith resorts to hypodermic injections of bromine at the circumference of the sore. The punctures with the point of the syringe are made at intervals of from one-half to three-fourths of an inch, and one drop of pure bromine is thrown into the tissues at each application. The mode of dressing the surface of the sores with the bromine was exhibited to me by Dr. Goldsmith. From my observation of the immediate effect of the reagent upon the diseased tissues, and of the condition of the sores upon which it had been previously applied, I am inclined to look upon the remedy as one of great value, and well deserving of a fair and extended trial.

Surgeon Goldsmith declared to me that in forty-eight hours the specific character of any sore, the result of hospital gangrene, can be destroyed by a thorough use of the bromine. The arrest of the virulent process is at once evinced by the absence of the peculiar odor, and by the marked change for the better which immediately ensues in the constitutional symptoms.

From conversation with Surgeon Goldsmith I inferred that he regarded hospital gangrene as essentially a local affection, and that as soon as a decided local impression is produced upon the sore all danger to life is averted.

The whole number of cases of hospital gangrene treated in the Louisville hospitals up to this time amounts to eighty-eight. But two deaths have occurred, and in these instances the disease was complicated with a very extensive inflammation of the cellular tissue.

I would remark that in the Louisville hospitals but little tendency has been observed in the disease to spread from bed to bed, although isolation of the gangrenous patients has not been enforced. In my own judgment the absence of this tendency to infection tells strongly against the supposed virulence of the affection, and should even throw doubts on its true nature, at all events in some instances. Assuming the disease, however, to be the veritable hospital gangrene, the facts connected with its origin were peculiar. The disease occurred almost always in patients who had been wounded at the battle of Murfreesboro, and who had been retained in crowded hospitals for some time previous to their transportation to Louisville. I am informed by Surgeon Thurston, U.S.V., Medical Director of the Nashville hospitals, that no one upon whom the gangrene had already appeared was ever sent from Nashville, and yet many were so infected when admitted to the Louisville hospitals. The development of this disease on the route seems to have been owing to the fact that the transportation of the wounded was effected by means of crowded and ill ventilated boats, and that the trip by the Cumberland and Ohio rivers frequently ocupied several days. During this time these patients, who had already undergone much suffering, were exposed to all the influences most apt to engender this disease. In contrast with this fact it was found that, as soon as the Louisville and Nashville Railroad was opened, so that the wounded could be conveyed from city to city in one day, all importation of gangrenous sores into Louisville ceased. The development of hospital gangrene during the boat transportation is a noticeable fact, and is strikingly analogous with the same phenomena observed among our paroled wounded prisoners from Richmond, received into the Annapolis General Hospital some months since.

Erysipelas.—Two hospitals are especially set apart for this disease in Louisville (Nos. 19 and 20), both at some distance from the city, and originally country residences. These buildings are located on rising grounds, are well ventilated, and are tolerably well suited for their present purposes. All cases of erysipelas occurring in the city are at once sent thither, and strict isolation is enforced.

The whole number of cases of erysipelas treated at Louisville was two hundred and twenty-eight, of these ninety-seven were treated in Hospital No. 19, one hundred in Hospital No. 20, and thirty-one cases in Hospitals Nos. 4, 8, and 10. Out of the whole number fifty-one died, and one hundred and seventy-seven recovered.

Treatment.—In the application of bromine to the treatment of erysipelas two different methods were employed: first, by the action of the vapor of bromine in the affected part; second, by a direct application to the erysipelatous surfaces of a solution of bromine of varying strength. In the first method the part affected was enveloped in dry lint, a cloth saturated with pure bromine was then applied over this, and the whole dressing covered with a piece of oiled silk. The only objection to this treatment was the tendency of the bromine to blister the skin by soaking through the intervening layer of the lint. The other mode of using the bromine is to apply directly to the inflamed integuments a solution of the bromine and bromide of potassium, of the strength of from fifteen to forty drops of the former to an ounce of water. An ample opportunity was afforded me to observe the results of this treatment in the disease in question, and I have no hesitation in pronouncing it one which, so far as I have seen, is of the greatest value.

Having finished my observations of erysipelas and hospital gangrene in Louisville, I proceeded to Nashville and placed myself in communication with Surgeon Thurston, U.S.V., Medical Director of hospitals in that city. With him I visited all of the principal hospitals, and among others the one appropriated to the reception of cases of erysipelas and hospital gangrene. I learned that the reports as to these diseases in Nashville had been much exaggerated. The whole number of cases of gangrene which had occurred since the battle of Murfreesboro has not exceeded twenty, and of these but six remained, all in progress of recovery.

The treatment followed in the Nashville hospitals consisted of applications of bromine, and the use of nitric acid in the ordinary manner. Dr. Thurston informed me that the latter treatment was preferred, and had, he thought, yielded the most successful results. It did not seem to me, however, that the bromine treatment, as practised in Nashville, was as thorough and effective as that pursued under the immediate supervision of Dr. Goldsmith.

Erysipelas in Nashville.—The number of cases of erysipelas following the battle of Murfreesboro averaged about sixty until recently. At the time of visit that number had fallen to twenty, and all were tending towards recovery. All cases of disease were isolated on their first appearance in a hospital set apart for the purpose, under the charge of Asst. Surgeon Brown, U.S.A. This building was clean, well ventilated, and well managed. At the first outbreak of the affection several deaths had occurred in patients severely wounded.

I was informed by the Medical Director that at present the disease was tractable, and yielded readily to therapeutic measures.

The treatment found most efficient, and which was almost universally adopted, was the local use of the bromine as already described; for constitutional remedies dependence was placed on iron, bark, tonics, full diet, etc.

Leaving Nashville I proceeded to Murfreesboro. The hospital gangrene, which at one time had been there rife and destructive, had almost disappeared; but few cases remained, and were convalescent.

The bromine treatment had been freely employed, but with varying results. I observed that its strongest advocates were those medical officers who had been previously stationed in Louisville, and who had been instructed in its use by Surgeon Goldsmith.

In conclusion, from a careful investigation of the cases in hospital at the time of my visit to the cities above mentioned, I would remark:—

1st. That the external employment of bromine in the treatment of hospital gangrene has been attended in Louisville with the most marked and beneficent results.

2d. That I have not observed that any injurious consequences whatever have resulted from its application, but the contrary.

3d. That all the medical officers with whom I have conversed in Louisville, Nashville, and Murfreesboro, unite in testimony as to the valuable therapeutic powers of bromine in the treatment of erysipelas: my own observation fully confirms their views.

4th. That as a disinfectant the use of bromine in hospital wards, and especially in hospitals intended for the reception of infectious diseases, is to be recommended, and is eminently deserving of further trial.

It will be observed that in the above report I have not alluded to the subject of pyæmia. In explanation, I will state that I did not meet the disease in any of the hospitals I visited. I was informed that the pyæmic affection had not existed to any great extent; at all events, to an extent unduly proportioned to the number and gravity of the wounds following the Murfreesboro battle. Full reports, however, of the affection, as it did prevail, are in process of preparation, and will be submitted to you when received.

I have the honor to be
Very respectfully,
Your obedient servant,
JNO. H. BRINTON,
Surgeon U.S.V.

W. A. HAMMOND,
Surgeon-General U.S.A.
WASHINGTON, D.C.

GENERAL ORDERS, No. 52.

HEADQUARTERS, ARMY OF THE POTOMAC.
Camp near Falmouth, Va., May 15, 1863.

THE suggestions contained in the following extract from a communication from the Medical Director of this Army will be strictly observed by all concerned, and it is made the duty of corps and other independent commanders, as well as of officers of the Inspector General's Department, to enforce a compliance with the same.

By Command of Major-General HOOKER.

S. WILLIAMS,
Asst. Adjutant-General.

OFFICIAL:

HEADQUARTERS, ARMY OF THE POTOMAC.
Medical Director's Office.
Camp near Falmouth, Va., May 12, 1863.

GENERAL:

* * * * * * *

In the selection of camping ground, that should be selected which has not heretofore been occupied by troops, but new ground, and that which has natural drainage; all low-lying and bottom lands, and lands in the vicinity of stagnant water, should be avoided. Every camp should be thoroughly ditched by main ditches 18 inches deep, and the ground around the tents drained by ditches leading into the main ditches of the camp. Camps should, whenever possible, be pitched in the vicinity of running streams or of living springs, and the use of surface water, or that from holes dug two or three feet in the ground, should by all means be avoided. Camps should not be formed in the woods, but upon the open ground, where a full and free exposure to the sun and air can be obtained, and the tents should be pitched *upon* the ground, and in no case should men be permitted to excavate the earth underneath them; nor should the distance between the tents be less than that required by the Regulations. The tents should be struck twice a week, and the ground over which they have been pitched exposed to the direct rays of the sun and to the winds, and if possible, they should be placed upon new ground, if only a few feet distant, once a week. The troops should be required to procure the small boughs from the pine tree and spread them thickly upon the ground covered by the tents, and should renew them every week; these will keep them from sleeping on the ground, which they should not be permitted to do.

The cooking, especially when in camp, should be done by companies, and not by individuals or by squads, and for this purpose two men should be detailed from each company as cooks, one relieved every month, thus allowing each one detailed to be on this duty for two months.

The importance of police, general and personal, cannot be too highly regarded. The blankets and bedding of the men should be removed from the tents and exposed to the sun and air daily, when the weather will permit. Every tent, and the grounds in and about and between the camps, should be thoroughly policed daily, and all refuse matter and filth of whatever kind be buried at least three feet under-ground. All dead animals, all offal and blood from slaughtered animals, should be at once buried at least four feet beneath the surface; and the refuse matter from stables and wagon yards should be buried two feet under ground, or burned. In every camp sinks should be dug and used, and the men on no consideration allowed to commit any nuisance anywhere within the limits of this

Army. The sinks should be eight feet deep if the ground will permit, and have earth to the depth of six inches thrown in every evening, and when filled within three feet of the surface, be entirely filled up with earth, and new ones dug. No one thing produces a more deleterious effect upon the health than emanations from the human body, especially when in process of decay; and this one item of police should receive especial attention.

Holes should be dug near each company kitchen, in which should be cast all the refuse matters from it, and when filled to within two feet of the surface, they should be filled with earth, and new ones dug.

The men should be required to wear their hair cut short, bathe twice a week, and put on clean under-clothing at least once a week. The troops should have their breakfast as soon as they rise.

Spasmodic efforts in a matter of such paramount importance as police can be of no service, and I recommend that regimental and other commanders be required to see that these suggestions, if they meet the approval of the Commanding General, be fully and continuously carried into effect.

I am, General,
Very respectfully, your obedient servant,
JONA. LETTERMAN,
Medical Director.

Brigadier General S. WILLIAMS,
Asst. Adjutant General,
Army of the Potomac.

(CIRCULAR NO. 6.)

SURGEON-GENERAL'S OFFICE,
WASHINGTON, May 4, 1863.

I. From the reports of medical inspectors and the sanitary reports to this office, it appears that the administration of calomel has so frequently been pushed to excess by military surgeons as to call for prompt steps by this office to correct this abuse; an abuse the melancholy effects of which, as officially reported, have exhibited themselves not only in innumerable cases of profuse salivation, but in the not infrequent occurrence of mercurial gangrene.

It seeming impossible in any other manner to properly restrict the use of this powerful agent, it is directed that it be struck from the Supply Table, and that no further requisitions for this medicine be approved by medical directors. This is done with the more confidence as modern pathology has proved the impropriety of the use of mercury in very many of those diseases in which it was formerly unfailingly administered.

II. The records of this office having conclusively proved that diseases prevalent in the Army may be treated as efficiently without tartar emetic as therewith, and the fact of its remaining upon the Supply Table being a tacit invitation to its use, tartar emetic is also struck from the Supply Table of the Army.

No doubt can exist that more harm has resulted from the misuse of both these agents, in the treatment of disease, than benefit from their proper administration.

W. A. HAMMOND,
Surgeon-General.

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SPECIAL ORDERS, No. 197.

WAR DEPARTMENT, ADJ. GEN'L'S OFFICE,
WASHINGTON, D. C., May 1, 1863.

8. The following officers (published officially March 18, 1863), having failed to make satisfactory defence before the Military Commission, instituted by S. O. No. 53 current series from the War Department, as to the charges against them, and now set opposite their respective names, stand dismissed the service of the United States, to date March 18, 1863.

Absence without proper authority:

Surgeon J. D. Hewett, 107th New York Volunteers. Assist. Surgeon S. M. Haud, 137th Penn. Vols. Assist. Surg. Jas. A. Reed, 69th N. Y. Vols.

The following for accepting bribes for procuring discharge of soldiers:

Assist. Surgeon J. P. Alcorn, 126th Ohio Vols.

By order of the Secretary of War,
E. D. TOWNSEND,
Assistant Adjutant-General.

SPECIAL ORDERS, No. 199.

WAR DEPARTMENT, ADJ. GEN'L'S OFFICE,
WASHINGTON, May 2, 1863.

9. The following assignments are made of medical officers:—

Assistant Surgeon J. R. Gibson, U.S.A., now on duty in General Hospital at Annapolis, Md., to report to the Commanding Officer (Lt.-Col. G. D. Ramsey) at the Washington Arsenal, Washington, D. C.

Surgeon Charles H. Crane, U.S.A., when relieved as Medical Director, Dep't of the South, to repair to New York City, and to report from thence by letter to the Surgeon-General.

Assist. Surgeons Philip Harvey and H. W. Kendall, U.S.V., to report in person to Major-General Grant, commanding Dep't of the Tennessee, and by letter to the Assist. Surgeon-General at St. Louis, Mo.

Assist. Surgeon William Thelkeld, U.S.V., to report in person to Major-General Rosecrans, commanding Dep't of the Cumberland, and by letter to the Assist. Surgeon-General at St. Louis, Mo

Assist. Surgeon Frank Meacham, U.S.V., to report in person to Major-General Burnside, commanding Dep't of the Ohio, and by letter to the Assist. Surgeon-General at St. Louis, Mo.

13. Satisfactory evidence having been produced to show that the disability for which Assist. Surgeon T. S. Treadway, 27th Connecticut Vols., was discharged, did not exist before entering the service, paragraph 4 of Special Orders No. 138, is amended accordingly.

By order of the Secretary of War,
E. D. TOWNSEND,
Assistant Adjutant-General.

SPECIAL ORDERS, No. 203.

WAR DEPARTMENT, ADJ. GEN'L'S OFFICE
WASHINGTON, May 5, 1863.

13. Surgeon Desault Guernsey, 174th New York Vols., having tendered his resignation, is hereby honorably discharged the service of the United States, to date April 5, 1863, his leave of absence having expired that date.

17. The following assignment of medical officers is made:—

Assist. Surgeon J. H. Currey, U.S.V., to report for duty to Surgeon Josiah Simpson, U.S.A., Medical Director at Baltimore, Md.

Asst. Surgeon John Bradley, U.S.V., to report in person to Major-General Grant, commanding Dep't of the Tennessee, and by letter to the Assist. Surgeon-General at St. Louis, Mo.

Assist. Surgeon H. T. Legler, U.S.V., to report in person to Major-General Rosecrans, commanding Dep't of the Cumberland, and by letter to the Assistant-General at St. Louis, Mo.

Surgeon Charles Mayo, U.S.V., now on duty in this city, to report in person to Major-General Grant, commanding Dep't of the Tennessee, and by letter to the Assist. Surgeon-General at St. Louis.

24. Permission to remain in Washington city for ten days, under medical treatment, is hereby granted Assist. Surgeon John W. Williams, U.S.A.

By order of the Secretary of War,
E. D. TOWNSEND,
Assistant Adjutant-General.

SPECIAL ORDERS, No. 204.

WAR DEPARTMENT, ADJ. GEN'L'S OFFICE,
WASHINGTON, May 6, 1863.

10. The following officers having been pronounced incompetent to perform their duties by a Medical Board of Examiners, convened by Special Orders 96, current series, Army of the Potomac, are hereby discharged the service of the United States:—

Assist. Surgeon Michael Thompson, 83d Pa. Vols; Assist. Surgeon Geo. W. Bowen, 16th Michigan Vols.; Assist. Surgeon James S. Bradish, 116th New York Vols.

11. Surgeon N. P. Monroe, 20th Reg. Maine Vols., having declined submitting to an examination by a Medical Board of Examiners, convened by Special Orders 96, current series, Headquarters Army of the Potomac, is hereby discharged the service of the United States.

By order of the Secretary of War,
E. D. TOWNSEND,
Assistant Adjutant-General.

SPECIAL ORDERS, No. 207.

WAR DEPARTMENT, ADJ. GEN'L'S OFFICE,
WASHINGTON, May 8, 1863.

5. The following assignments of medical officers are hereby made:—

Assist. Surgeon William F. Breakey, 16th Michigan Vols., now on duty in one of the hospitals at Alexandria, to join his regiment without delay.

Medical Storekeeper Hennel Stevens, U.S.A., now on duty at Cairo, Ill., and not needed there, to proceed to Memphis, Tenn., to relieve Assist. Surgeon Joseph P. Wright, U.S.A., in his duties as Medical Purveyor at that place, the latter on being relieved to report to Major-General Grant for orders.

Assist. Surgeon Etienne Vaudry, Independent Battalion, New York Vols., now in New York examining recruits, to join his battalion without delay.

Surgeon Francis Bacon, U.S.V., now on duty in this city, to report for duty to Major-General Banks, commanding Department of the Gulf.

7. Captain C. P. Bergen, 61st New York Vols, having shown a want of appreciation for the honorable position of a captain in the army, by applying for the position of hospital steward, is hereby dishonorably dismissed the service.

10. Assist. Surgeon R. S. McGee, 100th Reg. Indiana Vols., is hereby dismissed the service of the United States, he having been a convict in the Illinois State Prison, on the charge of robbery and counterfeiting.

19. Hospital Steward Charles Mott, U.S.A., is hereby honorably discharged the service of the United States, to enable him to accept a clerkship in the Office of the Medical Purveyor, New York.

By order of the Secretary of War,
E. D. TOWNSEND,
Assistant Adjutant-General.

Original Lectures.

DISEASES OF THE RESPIRATORY ORGANS IN CHILDREN.

BEING A COURSE OF LECTURES PREPARED FOR DELIVERY DURING THE SPRING SESSION OF 1862 IN THE COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.

BY THE LATE
C. VAN ALEN ANDERSON, M.D.,
PHYSICIAN TO CHILDREN'S DEPARTMENT, DEMILT DISPENSARY, N. Y.

PART III.

CORYZA MALIGNA, ETC.

Coryza sometimes assumes other forms, which are of much more importance than the simple inflammation of the Schneiderian membrane, lasting three or four days, and distinguished by the copious flow of mucus. Thus we have coryza maligna, well known in the foundling hospitals of Europe; syphilitic coryza, not a stranger in any part of the world; and a peculiar typhoid form which prevailed in England about seventy years ago. Coryza, moreover, accompanies some blood poisons; it is one of the marked symptoms in the invasion of measles; it is often present in cases of diphtheria, and may be one of the most formidable complications of scarlatina. Coryza maligna occurs in debilitated children whose strength has been reduced by impure air, improper diet, or any other enfeebling cause. The accompanying fever, which is more marked and prolonged than in simple coryza, is asthenic in its type, and the whole course of the disease shows depression of the vital powers. At the same time the mucus which is secreted in the nasal fossæ is very tenacious in its consistency, or else the interior of the nose becomes lined with a false membrane, which entirely prevents the passage of the air, and may even extend to the tonsils and pharynx. Dr. West records a case in which the mouth was full of a ropy mucus, which it was necessary from time to time to remove with the hand. On the eighth day of the disease "the child's powers seemed much depressed; it sucked eagerly, for the secretion from the nose had become almost watery, but it swallowed with much difficulty. A layer of false membrane of a yellowish white color had now appeared on the soft palate and back of the hard palate, and on the tonsils." Proper measures being used this pseudo-membrane entirely disappeared by the eleventh day, and the infant, after a tedious convalescence, recovered. The dangers in this variety are twofold. Death may arise either from the weakening disposition of the disease itself, causing a fatal degree of asthenia, or else the nose being occluded, and the infant rendered unable to suck, it may undergo the agonies of starvation. This coryza maligna is, however, I believe, rare in this country; at least I have seen it but once in some five or six thousand cases of all diseases; and it does not appear familiar to English writers, except as being found in the works of continental authorities on diseases of children. An epidemic of a peculiar kind of coryza appeared in England in 1790, and was observed and described by Dr. Denman. It had very much the same symptoms as the last form which I have brought before you. The discharge from the nose was thick and puriform; dyspnœa was observed, not constant, but sometimes so distressing as to require an attendant to keep the child's mouth open; as were also fulness about the throat and neck externally, and a curious purple streak on the margin of the eyelids, which Denman regarded as pathognomonic. In a few days the infant became weak and languid, and the tonsils were found tumefied and of a dark red color, with ash-colored specks upon them, and in some there were extensive ulcerations. As the asthenia showed itself more and more there was a "catch in the respiration, as if the velum pendulum palati were elongated." Accompanying this constitutional debility was a disordered condition of the stomach and bowels, manifested by thick, pasty evacuations of a green or blue color. Six out of eight cases died, but on post-mortem examination no organic alteration was discovered beyond the signs of intense inflammation of the Schneiderian membrane. The treatment of the simple form of coryza is almost nothing, provided always it is not a symptom of a general affection of the mucous membranes. A mild diaphoretic, if the skin be very warm, will be advisable at intervals through the day, and a dose of purgative medicine with a warm bath at night.

The local distress and discomfort may be much relieved by warm fomentations—a hollow sponge dipped in hot water, and squeezed nearly dry, then laid on the child's nose and forehead, will enable you to apply the vapor bath externally and internally. Dr. Churchill recommends the greasing of the outside of the nose, which he says he knows by experience to be very useful, though he is unable to explain the reason why, and I myself can cheerfully endorse his statement. If the nose be very much obstructed, it is hardly necessary to inform you that the child must be fed artificially. Coryza maligna requires both general and local treatment. The depression of the vital powers calls imperatively for stimulants and tonics; while the distress about the nose, and the tendency to the formation of false membrane, must be met with particular care and attention.

Mucosities and incrustations which close up the nares are to be removed by lotions of marshmallow, linseed, or of milk obtained from the breast of the mother. When the pseudo-membrane appears, injections should be made with a glass syringe of alum, or of nitrate of silver—one grain and a half of the salt to one ounce of water—of sulphate of copper, in the proportion of four grains and a half to the ounce—or of sulphate of zinc in the same quantities. A very good way is to touch the orifice of the nostrils lightly with a stick of lunar caustic, and then to inject a little tepid water. If the nasal obstructions be such as entirely to prevent respiration, some French writers recommend the introduction of a small silver tube into each nostril, flattened and curved from before backwards, following the course of the flow of the fossæ, and fastened to each other under the nose. These two canulæ allow the passage of air, and prevent the child's dying at once by giving the disease time to cure itself. During the whole progress of the disorder you should frequently investigate the condition of the fauces, and on the supervention of any unusual redness there, promptly use the same topical applications. The most interesting of all the forms of coryza is that which depends upon congenital syphilis. The disease itself is peculiar, its symptoms remarkable, and the prophylactic measures which it demands, of great value. Its intensity varies greatly. You will occasionally have a coryza in young infants, which continues for a length of time in defiance of your treatment, presenting only the usual symptoms of the disease. Sometimes you will find a few copper-colored spots on some portion of the cutaneous surface, or may be able to trace a venereal taint in one or both parents, when your diagnosis will be clear; at other times you will not be aware of its true nature, until, driven in despair to some one of the anti-syphilitic remedies, the cure is effected. Yet though these mild cases of the disorder are now and then met with, there is no doubt that syphilitic coryza is a very terrible disease. Although at birth you may have evidences of the constitutional poison, yet most authorities agree that there is a period of incubation in the newly born child before the specific symptoms show themselves, and that among the earliest of these symptoms is a discharge from the nose. This period of incubation varies, though in the majority it does not last more than three months after birth. In an analysis of 158 cases by M. Diday, he found that 131 presented symptoms of the complaint before the end of the second month, 110 before the end of six weeks, and 86 before the end of four. The symptoms of the coryza of syphilis are at first the same as those of the ordinary form of the disease. There is the same discharge from the nostrils, and the same difficulty and distress in breathing and in sucking. The mucus, however, in the nose, owing to the constant evaporation of its fluid portion, finally assumes a condition of solidity, and is deposited upon the membrane in the shape of crusts. These crusts constantly accumulate and narrow the passage for the air through the nasal fossæ, until finally they become completely blocked up, and the child's respiration materially interfered with. This embarrassment gives rise to continual effort to detach the crusts—these efforts are successful, but instead of affording relief cause a hæmorrhage from the vascular membrane, which in many instances becomes a dangerous epistaxis. The next step in the progress of the symptoms—and one which is made in the course of a few days—is the establishment of ulceration. Pustules, fissures, and ulcers, begin to appear on the alæ nasi and the upper lip, and perhaps invade the larynx, rendering the voice hoarse and indistinct.

By this time, too, the nasal discharge is altered in character, assuming a puriform appearance. The Schneiderian membrane has been invaded, and is devoured by the baleful disease; but the destroyer is not satisfied by the disappearance of the soft tissues; the bones of the nose are next seized upon, and undergo necrosis; portions of them are discharged through the nostrils, and finally that hideous deformity occurs which results from the absence of the solid framework of this organ. Your diagnosis will be readily made, not only by the rapid progress and threatening character of the disease—by its peculiar action on the Schneiderian membrane, and on the bones of the nose—but also by the general symptoms of syphilis which you will discover in your patient. I do not intend to enter into them, for this congenital malady is a study by itself; but let me recommend you when you meet with coryza within six weeks of birth, always to look for mucous patches in the vicinity of the anus or perineum, or for some one of the cutaneous lesions which accompany this constitutional taint. The treatment of the disease is the treatment of syphilis—with the remedies for which I have no doubt you are all familiar. You must not be contented with medicating the child without paying attention to those about it; and you must not recognise the disorder without remembering the dangers which accompany it. Medicine will be of no use, if your patient continually imbibe the poison with its food; you must make inquiries as to the health of the mother and nurse, and if they are diseased, treat *them*, while at the same time you procure a healthy nurse for the infant, and prevent its being fed by any one else. Moreover, remember always that congenital syphilis is undeniably contagious; that a woman who has never been exposed to the primary infection may acquire the disease from her suckling, and that the duty of a medical man requires imperatively not only that he should alleviate or cure a malady, but also that, when it is in his power, he should prevent it. In conclusion, I shall read to you a case taken from the work of M. Bouchut, which illustrates extremely well what I have just told you.

"Celestine Victoria was born at L'Ouraine, Feb. 10th, 1842; her mother had, four years ago, sores on the vulva, for which she was admitted into the Hôpital des Cliniques, where she only remained fifteen days, and the cure was effected by means of ointments. As regards the child, who was quite well during the first weeks, she was attacked about the 25th or 26th of March with coryza, which was marked by extreme pains on breathing through the nose—a discharge from the nose, which was at first purulent, subsequently bloody, occasionally, indeed, a discharge of pure blood. The mother troubled herself but little about the coryza until she noticed the discharge of blood, and then, in the early part of April, she noticed the appearance of numerous red spots in the fold of the nates; next a superficial ulceration of the middle portion of the palatine arch near the soft palate. At this time the mother showed me the ulceration on the palatine arch, which I cauterized with a pencil of nitrate of silver. April 8th.—The following is the present condition of the child:—Respiration through the nose, which is well formed, is almost impossible; the little patient is therefore obliged to breathe entirely by the mouth. There is a profuse nasal discharge, which appears to consist principally of pus, but which is at times, according to the mother's statements, accompanied by a discharge of blood. On the middle surface of the palatine arch, near the soft palate, is a ragged ulcer, not deep, with a light grey surface from 0·12 to 0·16 of an inch long, and about 0·64 of an inch broad. Around the anus, on the internal surface of the nates, and a little way down the thighs, are several red patches of a vivid red color, but raised, some of which are superficially ulcerated and red at these points. Cleanliness was insisted upon, and cerate dressings to the red patches on the nates. The ulcer on the palate was occasionally touched with the pencil of the nitrate of silver. With respect to the nasal affection, the good effect produced at this time in another little patient in the same ward, encouraged M. Nélaton to prescribe seven grains of the iodide of potassium to be taken daily. This child was nearly the same age, and had the same affection of the nose as in the present case, and like this was born of a mother with the syphilitic taint. April 11th.—As yet no great change, except that on the outer two-thirds of the tongue are numerous whitish patches very like thrush; the mother, however, declares that this portion of the tongue has always been white, less indeed than it is at the present time. Being in doubt, and as another child had just died the same day of thrush in bed No. 5 of the same ward, M. Nélaton ordered the white part of the tongue to be touched with a brush previously dipped in a mixture of mel rosæ and hydrochloric acid. April 17th.—The child still continues to have a very abundant purulent discharge from the nostrils; the ulcer on the root of the palate is cicatrized, but the left eyelids have been since yesterday red externally, and greatly swollen, as in purulent ophthalmia; nothwithstanding this the conjunctiva is but slightly reddened, and there is very little purulent secretion. The right eyelids are slightly red externally: to be touched night and morning with a brush dipped in a solution of nitrate of silver. April 25th.—The palatine arch is now quite healthy, the ulcerations around the anus are also cured, the nose is progressing favorably, air can already pass by the nostrils, and the discharge has well-nigh ceased. May 1st.—The improvement still continues. May 5th.—There exists no longer any disease. May 19th.—The child has ceased to take the iodide of potassium. For several days the cure has been complete; the child is to be vaccinated by two punctures in each arm. May 25th.—The vaccine matter has not taken, but this is a common case in the ward. June 5th.—The child is discharged with the mother, both of them being quite well."*

The Health of the Western Armies.—We have recently conversed with several surgeons from Gen. Rosecrans' and Grant's armies. They all agree in representing the health of the troops as excellent. This is especially true of the Army of the Cumberland. Under the excellent direction of Dr. Glover Perin, Surgeon U.S.A., and Medical Director of Gen. Rosecrans' army, the health and comfort of the troops have greatly improved. Dr. Perin is one of the most indefatigable and conscientious surgeons in the army. His recommendations for improved cooking and general sanitary regulations have been fully endorsed by Gen. Rosecrans. The army is well supplied with everything in the medical line.—*Lancet & Obs.*

The Medical College of Ohio is in the midst of its special summer session, with a large class, there being nearly seventy matriculants on the books.—*Lancet & Obs.*

Longview Asylum.—Drs. J. B. Hall and J. W. Mock have been appointed assistant-physicians to the Longview (Hamilton Co., Ohio) Lunatic Asylum.

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* Bouchut, Dis. of Chil., p. 788.

Original Communications.

REPORT OF
SIXTY CASES OF HOSPITAL GANGRENE,
TREATED

By ALFRED NORTH, Act. Assist. Surg.
AT U.S.A. GENERAL HOSPITAL, FREDERICK, MD.

Hospital Gangrene is a species of moist Gangrene or Phagedena, which is characterized by the rapidity of its progress and by its infectious nature; in a mild form it occasionally makes its appearance in civil hospitals, but it is in overcrowded and in ill ventilated apartments that it is more commonly met with, and it is here that its true character can be most correctly and thoroughly studied. This disease made its appearance in this hospital about the middle of October. For the preceding three weeks the beds, floors, and even the greater part of the grounds had been occupied by the severely wounded from the battle-fields of South Mountain and Antietam (September 14th and 17th, 1862). The two barracks in which the disease first made its appearance were erected for the temporary occupation of the Provost City Guard, and from necessity used for hospital purposes, in order to accommodate the great number which was daily arriving. The floors were so slightly elevated from the ground as not to allow of the free circulation of air beneath them, and the windows so arranged that they could not be opened without blowing directly upon the beds, and even when this mode of ventilation was attempted the windows were frequently closed by the patients, especially at night, when fresh air was most needed. The utmost attention was paid to cleanliness before and after the outbreak of the disease. Every man was furnished with a new sponge, which was frequently and thoroughly washed and kept in view at the head of his bed; the soiled dressings, as soon as removed, were taken from the ward; regular inspections were made by the medical officer of the day, and by a reliable night watchman. Sixty-five patients were allowed to each barrack, which gave six hundred and twenty cubic feet of air to each patient. The commencement and progress of hospital gangrene, for a time, were very insidious; the open wounds, instead of cicatrizing rapidly as they had previously done, began to assume a sloughy and unhealthy appearance; this was especially noticed in patients occupying corners of the wards. Erysipelas and pyæmia also prevailed to a considerable extent, and minor operations were frequently followed by disastrous results. Thus, a disease which at first was but a simple sloughing ulcer, became one, the very name of which was, and continues to be, a word of terror to every wounded man in the hospital.

As soon as hospital gangrene was clearly recognised as such, the patients affected were immediately transferred to a tent fitted up for the purpose, and placed under my care; in this way sixty cases of the disease came under my observation during the last three months. It usually attacked ulcers that had nearly cicatrized. My attention was usually first called to them by the common, and I might almost say universal expression—"Doctor, I have a burning pain in my wound, and it is growing much larger." Upon examination the edges of the ulcer were found thickened, indurated, undermined, and jagged in appearance, the surrounding areola of a dark purple color, and the surface of the ulcer covered with a greyish exudation; if this was allowed to go on without treatment, or only simple dressings, for two or three days, extensive destruction of tissue, as of the calf of the leg or the muscles of the buttock, would take place, leaving behind a disorganized pultaceous slough, exhaling a peculiar stench, which, when once recognised, could never be mistaken. The concentric development spoken of by most writers upon this subject, especially Guthrie and Blackadder, has not been noticed here, except in very mild cases. The extension of the disease, for a time, seemed confined principally to the cellular tissue along the course of the muscles, the sheaths of which were finally stripped off, then the fibres of the muscles themselves were involved. The large nerves and arteries were the last to yield to the onward march of the disease; but these in time would give way (see Case No. I.) if the progress of the disease was not limited by the application of nitric acid. In this way I have seen good dissections made of the posterior portion of the thigh and of the calf of the leg. There are two characteristics always peculiar to this disease in which it differs from all other forms of gangrene, the one its peculiar odor or stench, and the other its depressing influence upon the mind; the former was noticed in fifty-three cases, and was so marked that it could be recognised upon my hands during all the day after handling the diseased parts, although disinfectant liquids were freely used. The latter characteristic existed among our patients here to an alarming extent, and constituted a great embarrassment to successful treatment. In one ward, accommodating eleven patients, there were, during two months, ten upon whom this mental depression was so great that they gave up all hope of recovery, and, wishing to shorten their time of suffering here, tried in various ways to procure poison from the nurse. This mental disturbance was recognised by M. Delpech in his treatise upon this disease, but he ascribed it to the misfortunes and sufferings of the French army. Guthrie, in speaking of it, says, "there existed a morbid dejection, or apathy, which could scarcely be removed, and on which, in very bad cases, no impression could be made. In others the humane solicitations of the medical officers have failed against the influence of oppressive gloom amounting to despair; expectation and hope seemed to be exiled from their minds by the dominion of painful despondency, which, prevailing in melancholy disorder, seemed uncontrolled or checked by the intrusive importunities of the present or the consciousness of a future existence."

The following case well illustrates the destructive nature of the disease as well as its influence upon the mind:—

S. D. Malery, private, 6th Ala., æt. 22, admitted October 22, 1862, with two flesh wounds on right side of chest, and a compound comminuted fracture of right leg at about its middle. He had been wounded at the battle of Antietam, Sept. 17, 1862. Both wounds continued to do well up to November 10th, when that of the side took on a sloughy action. For two days previously he had experienced a burning pain in it which prevented sleep at night. It was then observed that the surrounding areola was livid, and that the ulcer had assumed a circular form, with jagged, indurated, and everted edges, with its base covered with a grey tenacious slough. The ulcer was dressed with oakum, saturated with Labarraque's solution of soda, and tonics administered internally. Nov. 15.—By this time patient's general health began to be affected; he complained of loss of appetite, pyrexia, and occasional chills; the ulcer had extended to a moderate degree superficially, with but little change in its character. He was removed to-day to gangrene tents, the undermined edges slit up in various places, and strong nitric acid applied to the ulcer and also to the surrounding healthy tissue; was ordered tartrate of iron and potass in xv. grain doses three times a day. Nov. 20.—Two applications of the acid had sufficed to arrest the disease, and the ulcer had cleaned off and was granulating healthily; general condition much improved, and patient was removed from the gangrene tent. Dec. 9.—Four days since (the wounds of the side cicatrizing rapidly) well marked symptoms of hospital gangrene presented themselves in the suppurating wound of the leg, which, in the attack previously noticed, had been progressing favorably. Patient was again removed to gangrene tent, and nitric acid applied to the gangrenous tissue, which presented the same characteristics mentioned before in its first appearance. The following is a note made of the case: Patient's general condition very poor; mind much dejected and filled with gloomy forebodings; pulse 140 and very weak; entire loss of appetite, etc. The disease is making rapid progress, having involved and destroyed almost entirely the soft parts upon the posterior and inner aspect of the lower third of the leg, exposing the bone for about four inches. It was observed that at the first the integument, cutaneous nerves, and sheaths of the muscles were destroyed; and now the muscles themselves and the largest arteries and nerves are becoming involved, and are being converted into a blackened, disorganized pulpy mass, exhaling a peculiar stench which can be recognised in every part of the tent. In the upper portion of the leg, and also about the ankle-joint, the disease has not invaded the muscles themselves, but merely dissected them out and involved their sheaths. The whole limb to the body was much swollen, œdematous, and painful on pressure; severe burning pain was also complained of. To such an extent had the disease progressed that the question of amputation of the thigh was broached, several operations having been performed for the disease in other of the city hospitals without its recurrence in the stump. It was, however, decided to try the efficiency of the acid application. Patient was accordingly etherized, and all of the sinuses resulting from the extension of the gangrene among the muscles freely laid open, and the pultaceous slough removed with scissors and spatula, after which strong nitric acid was mopped on and then worked in by a sharpened stick. The application of the acid was also made to the adjacent healthy parts, this having been of service in limiting the extension of the disease. On recovering from the effects of the anæsthetic, ordered fifteen drops Magendie's solution of sulphate of morphine; brandy and beef-tea, each half an oz. every half hour. Dec. 22.—Patient's general condition has much improved. Is now quite cheerful, pulse 125 and gaining in strength; appetite returning, surface pleasant, etc. Very little if any shock followed the application of the acid on the 19th. The slough has separated, revealing a healthy granulating surface. The lower part of tibialis anticus, the inner portion of the gastrocnemius and soleus muscles, have been destroyed by the gangrene, together with the middle third of the anterior tibial artery and nerve; acid re-applied to several points where the disease had not been entirely checked, followed by dressings of oakum saturated in hydrochloric acid, half an oz., tincture of opium, 3 oz., water one pint. Feb. 9, 1863.—From the last date patient's condition has steadily improved, and the ulcer remaining from the result of the gangrene had granulated, cicatrized, and progressed so favorably, that there was decided prospect of saving the limb, when the disease, a few days ago, started again, and made its way through the muscles on the posterior aspect of the lower portion of the leg, and following the tendons behind the inner malleolus bored its way through the sole of the foot ere it was recognised. As before, the track was laid freely open, and nitric acid applied with a successful result, arresting the disease. Feb. 20.—Improvement since last note has been continuous both generally and locally. The ulcer remaining involves the entire posterior aspect of leg and side of foot to the great toe, and is closing rapidly. The subsequent history of the case shows that about March 1st erysipelas set in, and amputation of the leg near the tuberosity of the tibia was performed, with fatal results. No union of the fragments had taken place, and the ankle-joint was found to have been involved.

Case II.—Confederate, admitted September 21, 1862. He was slightly wounded in calf of right leg by a shell, and did well up to November 4th, when it commenced sloughing, with undermining, induration, and eversion of the surrounding skin. A burning pain in wound was also experienced; slight constitutional symptoms were present, with loss of appetite, irritative fever, etc.; no odor perceptible. Patient was etherized, wound laid freely open, and nitric acid thoroughly applied, followed by a yeast poultice. Ordered, tartrate of iron and potass, 2 drachms, water, 4 oz.; half an ounce to be taken three times a day. The ulcer after operation measured seven inches in length by four inches in breadth. Nov. 5.—Slough was removed this morning, some portion being cut off with scissors; gangrene appeared to be almost entirely arrested, but to some sloughy points nitric acid was re-applied; poultice and tonics continued. Nov. 8.—It was found that the disease was still progressing underneath the skin at various points. These sinews were laid freely open and nitric acid thoroughly applied; irritative fever slight. Nov. 10.—Gangrene is apparently arrested, the ulcer remaining is of large size, extending from heel to popliteal space, and has invaded the integuments of the whole calf of the leg, the base being formed by the remains of the gastrocnemius muscle. The slough has separated, and the granulations abundant throughout the whole extent of the ulcer; general condition improving. Dec. 3.—The wound, which had been granulating healthily up to within a few days since, has again been invaded by hospital gangrene, which has made rapid progress. To-day it was found to have extensively undermined the skin, and had proceeded along the sheaths of the muscles of the leg. A large sinew upon the outer aspect of limb was freely laid open by an incision extending from the middle of the leg to the external malleolus, the sloughing tissue removed by scraping, and nitric acid applied by means of a pine stick. The insinuation of the disease among the muscles rendered the thorough application of the acid very difficult. The burning pain, the induration and eversion of the edges of the ulcer, with constitutional excitement, etc., are present. Takes tonics and stimulants, and locally as a wash, Acid. hydrochloric., ½ oz., tincture opium, 3 oz., water, one pint. Dec. 23.—The application of acid mentioned at last date materially checked the progress of the disease, but at several points between the muscles repeated application became necessary. The disease starting at another point when checked in one place, resembles at times a serpiginous ulcer. Whenever the fibrous tissue became involved it was noticed that the disease became less amenable to treatment. The tendo-achillis has been almost entirely destroyed, only a small portion remaining, which was carefully preserved. The sloughing had involved also a large portion of the muscles of the calf of the leg, and had extended from a short distance below the knee to the ankle. The general condition has been kept up by good diet, etc. Jan. 15, 1863.—The ulcer remaining was about the size of a silver dollar and rapidly cicatrizing. Notwithstanding the loss of tissue patient is regaining, to a very great degree, the use of his foot.

The evidence of the infectious nature of hospital gangrene has been abundant. In one instance, after making a digital examination of a wound, I noticed that the cuticle upon my finger had been injured by a sharp spiculum of bone: no more was thought of this until two days after, when I was awakened at night by a burning pain in my finger, which extended up the forearm to the shoulder; this was soon followed by a headache, and a generally dull, uncomfortable feeling; the strong nitric acid was freely applied with a stick to the abraded surface, which was now inflamed and very painful. After two applications of the acid the pain almost entirely disappeared, and no further trouble was experienced.

All of the nurses, with one or two exceptions, were attacked in the same way, but the disease with them was not so easily limited, because energetic treatment was not soon enough adopted.

Case No. III. illustrates the contagious nature of the disease, as the nurse attendant upon patient, as well as the one occupying the adjoining bed, was *attacked by the disease.*

Case III.—Langford, Confederate, wounded in the groin at the battle of Antietam. On examination upon admission into the hospital, it was found that the femoral artery had been injured at a point about one inch below Poupart's ligament, and that an aneurism had resulted from it. This was operated upon ten days after by Dr. R. F. Weir, surgeon in charge, who tied the external iliac in its lower third. The operation was successful, and in two weeks the wound had nearly healed, when it took on an unhealthy action, and patient then complained of a burning pain in it. Anticipating what was coming, he was immediately moved to a stone building where there had previously been no gangrene; and here, November 21, he came under my care. He remained here four days before the disease became sufficiently developed to justify his removal to the gangrene tent. Nov. 25.—Patient is very desponding, and is growing weaker day by day; has considerable headache; pulse 120, and almost imperceptible; tongue furred, brown, tip and edges red and dry. The ulcer, which is three inches in width, extends from the pubes up nearly to the anterior spine of the ilium; has an unhealthy and sloughy appearance. Patient complains of a slight burning pain in wound, the edges of which are everted, jagged, and undermined for about two inches; the integument is indurated and tumefied, and extremely sensitive to the touch or the least movement of the limb; characteristic odor not well marked. The sinuses extending under the integument were freely laid open, and the surface of the ulcer scraped with a spatula, to which the acid was first applied with a mop, and then worked in with a stick, so as to get it down to the comparatively healthy tissue, and was also applied in a similar manner to the tissue surrounding the ulcer, and in this way destroy both the cuticle and cutis vera, and thus limit the extension of the disease. Superficially antiseptic poultices were applied, and opiates given to relieve pain; takes half an ounce of brandy and beef-tea every half hour. Nov. 26.—Although the pain following the application of the acid was so severe as to cause slight convulsions for a time, patient is feeling better to-day. Pulse 108 and gaining in strength. Fearing that the progress of the disease had not been entirely arrested, the acid was again thoroughly applied. Takes stimulants and tonics, with fifteen grains of tartrate of iron and potass three times a day. Nov. 28.—The black, charred slough has separated, revealing a healthy, granulating surface beneath. The extreme sensitiveness to the touch, together with the induration and swelling of the surrounding parts, has almost entirely disappeared. Applied oakum saturated with acid wash to the ulcer. Dec. 5.—Patient represents himself as feeling much better; mind hopeful and cheerful; appetite good; ulcer is cicatrizing rapidly. Continue stimulants and tonics. Dec. 15.—All unfavorable symptoms have disappeared, and patient is regarded as convalescent.[*]

The nurse attending upon patient before his removal to the gangrene tent, and the patient occupying the adjoining bed, to whose stump Longford's sponge, by mistake, was once applied, were both attacked by the disease, and were under treatment for a month in the gangrene tent.

Until 1813 hospital gangrene was generally considered as a constitutional affection, but the indifferent success which attended its treatment as such during the Peninsular War led European surgeons to regard it more as a local affection. In sixty cases of hospital gangrene which have come under my observation, in only seven cases were the local manifestations preceded by constitutional symptoms. In forty-seven cases constitutional symptoms followed the sloughing, and in six cases there were none during the entire course of the disease, thus showing fifty-three cases in support of its local nature. Again, in twenty cases the patients had other wounds besides those affected with the disease, and in eighteen of these the unaffected ulcers continued to cicatrize healthily while the disease was rapidly extending in the others. Messrs. Blackadder, McLeod, and Taylor, regarded the disease at first as a purely local affection; while Mr. Coate, who observed the disease in St. Bartholomew's Hospital, is disposed to give it a constitutional character, although he recognises a stinging pain as the first symptom of the disease.

From the local symptoms having so generally preceded the constitutional, and from the power of the acid in arresting the disease, as well as from the condition of unaffected wounds, hospital gangrene, as seen here, was regarded as a decidedly local affection, capable of giving rise to severe constitutional disturbance.

The pain in fifty cases was described as burning or stinging, and in ten cases it was not observed The odor which Guthrie regards as pathognomonic was noticed in fifty-three cases; in the seven remaining cases, in which it was not recognised, the disease was of a very mild type. The circular form also spoken of by the same author, and regarded by him as of equal importance, was seen in but few cases.

With one exception no cases of recent wounds were attacked by the disease, although operations were frequently being performed. It seemed to choose by preference nearly cicatrized ulcers, principally those situated upon the lower extremities: these formed three-fourths of the whole number of cases, those on the body one-sixth, and on the upper extremities one-twelfth. Its occurring so much more frequently upon the lower extremities may be accounted for by the fact that patients having wounds upon these parts were more likely to be confined to bed, and thus prevented from free access to fresh air. The predilection of the disease to attack wounds of exit rather than of entrance, as noticed by McLeod in the Crimean war, has not been seen here.

Having previously regarded hospital gangrene as a constitutional affection, nothing but simple local applications were at first applied, in connexion with constitutional remedies; but, finding that this would not limit the extension of the disease, the following course was adopted, which proved so successful that but little change was made in it during the prevalence of the disease in this institution: As soon as the affection was recognised the patients were immediately removed from the barrack to a tent fitted up for the purpose, where fresh air could be plentifully supplied. Ether being administered, the sinuses were freely laid open, and the wound enlarged, if necessary, to expose all of the affected parts. After having removed the pultaceous slough with the scissors, the surface of the ulcer was scraped with a spatula, and nitric acid applied with a mop and worked in with a sharp stick. In a similar manner it was then applied to the surrounding comparatively healthy tissue, which would limit superficially, for a time at least, the extension of the disease, and relieve almost instantly the burning pain. If the case was very urgent, instead of waiting two or three days for the slough to separate, it was forcibly removed, or, more correctly, dug away, and a fresh application of the acid made One application was not always sufficient, especially if the disease was working among the tendons or underneath deep fasciæ; antiseptic poultices were applied until the slough began to separate, when the following lotion was substituted: acid. hydrochloric., ½ oz.; tincture opium, 3 oz.; water, a pint. The constitutional treatment adopted consisted of the use of brandy and quinine, with fifteen grain doses of tartrate of iron and potass three times a day.

The average number of applications of acid in the sixty cases was six, maximum twenty. The average length of time required to limit the disease and restore healthy action to the ulcer, two weeks; maximum, six weeks.

Notwithstanding that concentration of the disease, so to speak, was in a great measure prevented by scrupulous attention to cleanliness and ventilation, and the removal of all patients, as soon as attacked, to a tent, and the transfer of others to general hospitals, the disease continued unchecked for nearly four months.

In only one case was it directly the cause of death, and in only three, where the disease was present in a mild form, did it contribute to a primary affection in bringing about an unfavorable termination. Nor has it been followed by pyæmia, which is said to be of frequent occurrence, or by secondary hæmorrhage, although the middle third of the posterior tibial artery was destroyed in one case, and the brachial and femoral arteries laid bare in others.

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[*] For two months after this date patient was up and about the ward, when secondary hæmorrhage, following sloughing of the sac, supervened, and in four days resulted fatally.

The absence of pyæmia and secondary hæmorrhage I have thought to be due to the free application of the strong acid, and have accordingly applied it or some other mineral acid to all unhealthy wounds in my barrack, and for six months have not had a single case of pyæmia, although previously it was of frequent occurrence.

May it not be that these two allied diseases, hospital gangrene and pyæmia, depend upon a poison, perhaps of an animal or septic origin, in the wound, which a dilute mineral acid, used as an injection, has the power to destroy and thus prevent systemic affection?

No microscopic examinations were made here for want of proper conveniences.

A CASE OF PREMATURE LABOR

AND RETAINED PLACENTA.

By CHARLES H. JONES, Act. Asst. Surg. U.S.A.,

OF STEUART'S MANSION HOSPITAL.

Mrs. ——, aged 35 years, primipara, residing in Baltimore, was suddenly seized with nausea and vomiting at a period calculated to be five weeks previous to her confinement. The vomiting was obstinate, and became exhausting from having continued with but slight intermission for three days. She also became at the same time troubled with anasarca of the lower extremities. The nausea and vomiting were finally arrested by the aid of sedatives, stimulants, and counter-irritants. Her health had hitherto been good. The anasarca remained until after her confinement.

On the evening of the fifth of January I was called to see her. I found her sitting up and complaining of slight pain in the abdominal region. This she supposed was owing to an accumulation of gas, as she had for a long time been subject to periodic attacks of colic, and to obtain relief she had been taking some simple household remedies. I suggested the probability of its being incipient labor, ordered the patient to keep in a recumbent position, and prescribed a dose of morphia.

Early the next morning (the sixth), I visited her, and was informed that her sleep had been natural, and that the pain had ceased. Towards evening she again became annoyed by the pains, and attributed them to the same cause; but though to my own mind they appeared suspicious, they were not described as uterine. My interest in the case increasing, I again called late in the evening, and found these pains unchanged, resembling in no respect true labor pains. On being questioned closely, she informed me that she had not felt the motions of the child during the past month. I carefully auscultated the region of the uterus to ascertain if the bruit of the fœtal heart could be detected, but failed. She also complained of a "dead weight" in the lower portion of the abdomen, and at times felt cold chills creeping down her back. After my examination I was inclined to believe that the child was dead, and so expressed my opinion to her friends. The finger passed into the vagina revealed the fact that the os was dilated, and the breech of the child presenting.

The peculiar pains above described continued at regular intervals until the next morning (the seventh), when, from some unknown cause, they entirely ceased. The dilatation of the soft parts was more perfect, and all that seemed to be needed was to arouse the uterus from its inertia, and give it the impetus to expel the fœtus. Accordingly I gave her, in divided and full doses, secale cornutum, which, however, had no perceptible effect. By examination it was ascertained that the child had gravitated to the lower strait, and, as I could reach the breech with my hand, I determined to finish the labor by mechanical assistance. The hand was readily introduced, and the fœtus brought away with but little inconvenience or pain to the patient. The child proved to be in the eighth month of development, and, from its decomposed condition, must have lost its vitality in utero some time prior to its delivery. The manipulations in moving the fœtus did not tend to excite uterine contractions. The placenta being retained, after waiting some time, and failing in the usual means to excite uterine contractions, I proceeded to remove it. I found the uterus resting high up in the pelvis, and the os firmly contracted. The introduction of my hand, on this attempt, produced the most violent contractions of the vagina and soft parts, so much so as to benumb and almost paralyse my hand. This and several other efforts, made at stated intervals, did not accomplish my object, and I was finally obliged to desist. The patient was allowed to rest the remainder of the day and night.

The next morning I visited her again. She expressed herself free from pain, and I proceeded to make another vaginal examination, but owing to the rigid contractions of the parts I was completely foiled. The patient was placed thoroughly under the influence of chloroform, in the hope that the anæsthetic might have the effect of relaxing the soft parts and causing the dilatation of the os uteri, thereby enabling me to reach the placenta, and, if not to extract it, at least to ascertain its true relation to the uterus. But in this instance chloroform completely failed to act as a relaxing agent.

For the two or three succeeding days her case underwent no visible change, her sleep was quiet, and she was free from pain. The only indication presenting was to open her bowels, which was accomplished by a mild aperient. At the end of this interval I succeeded in passing my hand into the vagina and exploring the uterus, which was still high up in the pelvis, with the os tightly contracted around the cord.

The anxiety of the husband caused me to express the opinion that her symptoms indicated no immediate danger, and that I was inclined to trust to time and the powers of nature. In order that I might be sustained in this opinion, or be advised of one offering more probabilities of success, and also to avail myself of the experience of one of our most talented obstetricians, I asked for a consultation. Accordingly, on the afternoon of the eleventh of January, a consultation was held, and after investigating the case and deliberating over it, my determination to wait was sanctioned. Since the removal of the fœtus there had been a continuous flow of lochia, which had decreased in quantity, and was offensive. The patient was also inclined to be feverish, and complained of some tenderness on pressure being made over the region occupied by the uterus. She was ordered a febrifuge mixture, and hot fomentations were freely applied to the abdomen. Jan. 12th.—I again saw the patient in consultation, and found her symptoms somewhat improved. She had no fever, and the pain on pressure over the uterus had greatly lessened. The cord had sloughed away, and the quantity of the lochia had increased, while it had a less foul odor. Jan. 13th.—I visited her once more in consultation. She stated that she had rested well during the night. On making an examination per vaginam, the uterus was found not to have altered its position, and the os was undilatable. There was no noticeable change in the symptoms of the case during the two succeeding days. Her bowels were regular, emptied by aperients and injections, and the treatment was expectant. Jan. 16th.—Visited her in the morning. She complained of having been restless during the night, although she had no pain. The finger, being introduced into the vagina, much to my gratification, detected a hardened mass protruding through the os uteri. With much difficulty, as the os was firmly contracted around it, and the uterus high up in the pelvis, I succeeded in extracting it. The mass was pear-shaped, about the size of an ordinary doubled fist, flattened on one side, and free from any smell. It was nodulated in substance, and resembled cartilage.

This case was novel to me, and among its most remarkable features were, (1) the absence of regular uterine pains, (2) the absence of hæmorrhage, which was so small in quantity as hardly to stain her clothing, and (3) the number of days the placenta was retained, and its singular metamorphosis into a solid cartilaginous mass.

This patient perfectly recovered her health under a generous diet and tonics, without an untoward symptom supervening.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, Jan. 14, 1862.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

COMPOUND COMMINUTED FRACTURE OF KNEE PRODUCED BY MINIÉ BALL.

Dr. Merritt presented a specimen of compound comminuted fracture of the knee produced by minié ball, with the following history:

A private in the New Jersey Volunteers, aged 27 years, was wounded on the twenty-seventh of June at the battle of the Chickahominy by a minié ball, as he supposes from the fact that his comrades had such extracted from their wounds, which were received at the same time and place. The ball had entered the left knee at the boundary of the outer and posterior aspects opposite the external condyle of the femur, and passed out at the anterior aspect about the centre of the patella. He states that his limb was completely disabled, the hæmorrhage was considerable, and he was greatly prostrated. He lay two days on the battle-ground without surgical attendance. After this he was removed to a field hospital in the vicinity, where he remained four weeks receiving no proper surgical attention, and barely obtaining sufficient nourishment to sustain life. He followed the general rule of applying cold water to the wounded parts. During this time his knee became exceedingly painful and swollen, but afterwards subsided to some extent. He was then conveyed to the hospital at Savage's Station, and from thence in a few days he was taken in an ambulance to the James river, where he was transferred to a U. S. Hospital Transport. On the 6th of Augus the was received into the hospital "Euterpe" at Fort Monroe. At this time the injured limb was much worse, consequent upon the transportation. The knee was moderately swollen, but there was a profuse discharge of sanious ill formed pus from both ball-openings, which were only large enough to admit the introduction of the little finger. There was a burrowing abscess extending up the thigh to near its middle, and œdema of the leg and foot. The general contour of the knee was normal, excepting a curvature inwards of the leg upon the thigh at the joint. Digital exploration through the ball-openings readily detected comminuted fractures of the patella and external condyle of the femur. The probe also passed easily into the joint, and encountered rough and irregular articular surfaces. The general condition of the patient was feeble, but when the character of the injury, its duration, and the severe ordeal gone through, were considered, it was remarkably good, excepting the existence of diarrhœa. Although greatly reduced in flesh, with an exceedingly pale surface profusely studded with sudamina, still his pulse was fair, his appetite excellent, and his manner cheerful and hopeful. I accordingly decided to amputate the thigh, and the operation was performed on the eighth of August, forty-eight hours after admission. He bore the shock well, and soon rallied. Three days afterwards the stump was presenting a healthy appearance, and discharging slightly. About this time the "heated term" of August was at its height, and the patient manifested unusual susceptibility, which caused a loss of appetite, increase of diarrhœa, and depression of spirits. The consequence was that patient began to fail rapidly, and died on the fifteenth of August.

The points of interest in this case seem to me to be, that the patient should have survived so long, and in so good a condition, such a serious injury under such unfavorable circumstances, and that such a complete comminution of bone involving the knee-joint should not have attracted the attention of some surgeons at an earlier period, when proper surgical action could in all probability have saved the life of this soldier.

Dr. Sands remarked that he saw a very similar case last summer. A soldier, wounded at the battle of James Island, was admitted several weeks after as a patient in the Jews' Hospital. The wound seemed to be merely a flesh one, traversing the thigh in the neighborhood of the knee-joint. There was so little constitutional disturbance attending the injury that the idea of a compound fracture was entirely overlooked. Several days after, however, there was noticed a slight eversion of the foot, when a thorough examination was instituted. A compound comminuted fracture of the femur, involving the knee-joint, was then found, and amputation of the thigh was decided upon, but the patient was soon after attacked with dysentery, and died of the disease without the operation having been performed.

Dr. Conant expressed his belief that the application of cold water to wounds was very often attended with serious consequences. He did not think that the practice should be followed except in cases where a strong tendency to inflammation existed, otherwise the processes of nature were hindered, the plasma was dissolved, and the circulation was very much interfered with, giving rise in many cases to slough. This result he had frequently noticed in stump cases. The plan adopted by him to secure early union was that of applying a simple dry cloth to the wound.

SUB-LINGUAL SEBACEOUS CYST.

Dr. Post exhibited a sebaceous cyst removed from under the tongue of a middle-aged man. It presented very much the appearance of ranula, and Wharton's ducts could be seen, somewhat enlarged, running on each side of the tumor. The opening made in the cyst was necessarily a small one, in order to avoid wounding the ducts. The contents of the sac proved to be composed microscopically of fat cells and epithelial scales. The specimen was presented on account of the unusual situation from which it was removed, he never having seen or heard of a similar case.

Dr. Post also exhibited a small sequestrum which he had removed a few days before from a child, ten years of age, who, for two years previous, had suffered from a discharging sinus in the lower fourth of the femur. On cutting down upon the diseased part it was found that but one small piece of sequestrum existed, and had been sufficient to keep up the discharge for the length of time referred to. In concluding, Dr. Post remarked that surgeons were very apt to delay the removal of sequestra situated in the lower portion of the femur on account of their proximity to the femoral artery, and he had seen several instances where death by erosion of the artery could fairly be traced to this neglect.

Dr. Finnell remarked that he had seen two instances where he had thought the operation for removal of dead bone was performed too early.

FOREIGN BODY IN MEATUS AUDITORIUS.

Dr. Post next related the case of a young girl whom he was called to see, and who was suffering from intense inflammation of the meatus auditorius externus. The parts were so much swollen, and withal so tender, that it was impossible at first to make any thorough examination of the part. When, however, the inflammatory process had become somewhat subdued, and suppuration had established itself, on looking into the ear the passage from the external orifice was found to be completely closed by what appeared to be a swollen seed of some kind. The child was not aware of its introduction.

Dr. Finnell referred to a case of a little girl who had been brought to him some weeks before with a small shell in the ear. The foreign body was easily extracted by means of a bent probe. There had been previous attempts made by a druggist to extract the shell with a forceps, but all efforts with that instrument had failed.

Dr. Post concurred with Dr. Finnell in believing that a bent probe was much the best instrument to use for such a purpose.

POISONING BY MORPHINE—HALF A GRAIN TAKEN BY A CHILD—RECOVERY.

Dr. Conant related a case of poisoning by morphine in a child, nine months old. The salt, to the amount of half a grain, had been administered by mistake, and in thirty minutes after the child had ceased to breathe. Artificial respiration, by compressing the chest at regular intervals, was then commenced, and in the course of five minutes the little patient gasped for breath. The operation was kept up for an hour, and then stopped, when breathing likewise ceased. The child was then turned upon the face, and the tongue falling forward, a quantity of mucus was scooped out from the fauces. The pumping process was continued for an hour and a half longer, but as soon as the efforts were suspended, breathing also stopped. The artificial respiration was then continued for an hour longer, when the child was enabled to breathe on its own account. Twelve hours after taking the poison the child passed urine freely.

Dr. Conant also referred to a second case of poisoning by morphine. In that instance a man had taken ℥j. of opium at a single dose, and when first discovered the pulse was only 15 to 20 per minute, and the respiration only 4. Artificial respiration by Dr. Hall's ready method was kept up for five or six hours continuously before it was considered safe to allow the patient to breathe on his own account.

In both these cases death would have been inevitable, but for persistent efforts towards establishing respiration.

The Society then adjourned.

FOREIGN CORRESPONDENCE.

LETTER XXXV.

By PROF. CHARLES A. LEE.

Venice, Oct. 12, 1862.

VENICE, ITS PECULIARITIES, HOSPITALS, ETC.

> "In Venice, Tasso's echoes are no more,
> And silent rows the songless gondolier;
> Her palaces are crumbling to the shore,
> And music meets not always now the ear;
> Those days are gone; But beauty still is here.
> States fall; arts fade; but Nature does not die."

Venice is a glorious place for cripples, for as all locomotion is by gondolas there is no particular use for legs. Palmer and Bly would be at a discount here, and their polished specimens of artificial limbs, "better than the natural," would only serve as curiosities for the museums. How strange to find oneself in a city built on a hundred islands, where the only streets are canals, the only vehicles gondolas, where a horse was never seen except the brazen horse of St. Mark's, no wheeled carriage ever known, no rumbling of wheels ever heard; where the houses all stand in the water, and entering one seems like going on board a vessel, only there is no sea-sickness. "See Venice and die," seems to be the sentiment that animates all English, if not other travellers, and I must confess that it is a delightful place for those fond of novelty and not afraid of fevers, especially for a short period at the right time of the year. But I shall not apply for the consulship here, as I doubt whether I could ever feel exactly at home. I do not like to stop long in a place where every hour is a contradiction to my whole past existence; where I could never see a hill, or a mountain, or a wood, or an ear of corn growing, or green fields; or can hear a bird sing except in cages, or see an animal except in a menagerie; where there is no spring-water but what is imported, and no rain-water but an infusion of pigeon dung, and no artesian wells but are charged with sulphuretted hydrogen and iron; where the 146 canals send forth a horrid stench during the autumnal months; two, at least, of the plagues of Egypt are endemic and perennial; to say nothing of the hungry swarms of mosquitoes, which complement the Italian sanguinary practice in a manner not soon forgotten. But then to counterbalance all this Venice is, undoubtedly, the most picturesque city in Europe, and full of character and variety. But as the pleasure of sight-seeing depends chiefly on association, it is necessary to be well posted in Venetian history, to "read sermons" in the stones of its palaces and public buildings; and the traveller must believe also implicitly in every word of the "Merchant of Venice," so that when he stands on the Rialto he has a full conviction that he occupies the very spot where Antonio rated Shylock about his "monies and his usances," and where he "spat on his Jewish gabardine," and where Othello addressed the assembled senate. It requires no great stretch of faith to believe in the "Thousand and one Tales" after visiting St. Mark's on an evening; seeing its magnificent square in all its marble beauty; the domes and minarets of its old church; the barbaric gloom of the Doge's palace; its proud, towering campanile; its famous Corinthian houses; the bronzed lion of the Pireus, and the old "Bridge of Sighs;" walking in the illumination of its long line of cafés, observing the variety of costume, the thin veil covering the pale Venetian beauty; the Turks with their beards and caftans, and long pipes and chess-playing; the Greeks with their skullcaps and richly laced jackets; Jews, Armenians, Persians, Moors, Sclavonians, Russians, all in their native garb, to say nothing of French, German, English and American tourists; the whole presenting a combination of novelty and variety scarcely ever met with in any other city of the world.

There are great attractions here also for the epicure; beef of the finest quality furnished by the horned cattle of Styria; exquisite veal from Chioggia; the fattest of poultry from La Polisine di Rovigo; excellent game from the Maremma. (Snipes in winter at five sous each and other things in proportion.) The Queen of the Adriatic is rich, too, in her piscatory treasures, her splendid large fat oysters, her magnificent roach and turbot, ortolans, sole, gudgeon, ling, tunny, pidocchi, mullet, roes in the form of caviar (bottarga), sardines, mackerel, lobster, etc., etc. There is also abundance of fine fruit here from the hills of Este, Monsilice, and Martagna, wines of the best growth of French and Spanish vineyards, and, as it is a free port, most other commodities at a cheap rate.

But the characteristic features of Venice are too well known to need further description; let us see what it has that deserves the particular notice of the medical man. And first its *hospitals*. In these I have been greatly disappointed, as they are vastly larger and better managed than I had supposed. The large Civil Hospital at Venice stands on the banks of one of the principal canals, near the church of San Giovanni e Paolo; it dates as far back as 1485 and consists of the magnificent buildings of the Scuola di San Marco, a religious order devoted to the care of the sick and poor of the city. The buildings are somewhat irregular, but very spacious, and were devoted to their present purposes after the fall of the republic. The whole establishment is capable of accommodating from 1500 to 2000 patients. The entrance is through a wide and high hall, with splendid marble floors and columns, beautifully carved wood ceilings and frescoes; and the wards, which are between one and two hundred feet long, with very high ceilings, are grouped around six large court-yards, in one of which is the sarcophagus of Marino Faliero, the decapitated Doge. There are sixty-two halls or wards admitting of extensive classification. There are, for example, lying-in wards, syphilitic wards, fever wards, wards for diseases of children, for female lunatics, for ophthalmic cases, for medical and surgical diseases. One of the principal physicians conducted me over every part of the establishment, and explained everything minutely. In some of the wards there were four rows of patients, owing to repairs going on in the building. Still, I doubt not there were over 1200 cubic feet of space to every bed, owing to the great height of the ceilings. Every part was scrupulously neat and clean, and the utmost order and system everywhere prevailed. There are 1000 patients in the buildings, under the charge of 11 principal surgeons and physicians, 14 assistant surgeons, 16 sisters of charity, 8 apothecaries, 1 director or acting principal, and 1 director-general. There are two classes of patients, pauper and pay. Of the latter are three grades: 1, those supported by the district or commune to which they belong, who pay 55 cents per day; 2, a class of private patients who pay 40 cents per day; and 3, a superior class, who have better accommodations, and who pay 88 cents. In the court-yards are nine cisterns for rain-water and one artesian well. This is forty-five metres deep, and the water has a taste of sulphuretted hydrogen. Children under seven occupy the basement, which struck me as very damp and unhealthy. The little patients all had a miserable, pale, sad, and sickly look. The apothecary apartment, as in all Italian hospitals, was on a large and splendid scale, and admirably managed. The buildings are of two stories, and the whole thrown into large wards, one of which was devoted to cases of *pellagra.* All were extremely clean, quiet, and well ventilated.

The *male lunatic asylum of Venice* (*San Servolo*) is situated on an island in the lagune between Malamono and Lido. It is near the Armenian convent of San Lazare, where Lord Byron often resided, and is under the charge of monks of the order of St. John of God. Some of them have received a regular medical education at the University of Padua, as has also the superintendent, who is a very intelligent and capable man. The arrangement of buildings is similar to that of the civil hospital in the city. They are arranged around central courts, opening front along corridors, and the establishment covers the whole island. There are cells for the more violent and dangerous patients, containing two beds each, while the epileptics or convalescents sleep in wards containing a large number of beds. The bedsteads are of iron, fastened to the floors, which, as well as those of the corridors, like those of nearly all Italian hospitals, are of polished concrete, hard and beautiful as variegated marble. The wards are high, wide, and well ventilated, and in winter are warmed by stoves. This institution does great honor to the city of Venice. It embodies most of the recent improvements in classification, and moral and physical treatment. No corporal restraints are used, unless padded rooms are so called, and it is very seldom that they are brought into use. In cases of active excitement, patients are generally confined to their cells. There are various workshops connected with the establishment, in which different trades and pursuits are carried on by the patients, as tailoring, shoemaking, carpentering, smith-work, etc. The kitchen work is also chiefly done by patients, under the direction of the chief cook. There are spacious exercising grounds adjoining, and elevated alcoves from which there are beautiful views of Venice, etc. In all respects this institution will well compare with the better class of English and French asylums.

The annual reports, which appear to be very accurately kept, show that the total number of patients for the ten years from 1849 to 1861 inclusive, was 3617, and the deaths 1178, giving a rate of mortality of 32·5 per cent. The mean number of patients during the last five years has been 343, and the mean number of deaths 75 per annum, being an annual mortality of 21·8 per cent. During the last five years the total number treated was 1314, the deaths 377, and the rate of mortality 28·7. Of this number, however, 411 were cases of pellagra, and the deaths in this form of insanity were 133, leaving a mortality of 27·02 per cent. for ordinary cases. There are accommodations for 360 patients in the whole establishment; the total number in 1861 was 567. Pellagra is a common disease in Italy, and it is very apt to be accompanied or followed by that form of insanity called melancholia. The officers are very civil and hospitable to strangers, and take great pleasure in answering all questions and showing all the arrangements. Intelligent zeal, humanity, kindness, and skill, are conspicuous in every department of the establishment. In both the hospitals above mentioned, a charge is made for the maintenance of the patient on the town or district in which he resides, if it can be ascertained; if not, the expense is charged to the municipality of the city. In both the only requisite for admission is, that the patient stands in need of medical assistance.

American Medical Times.

SATURDAY, MAY 30, 1863.

MEDICAL MEN *vs.* MEDICAL MEN.

A case has recently been tried in an English court, which strikingly illustrates the moral obliquity of some members of our profession, when called to the witness's-stand during the trial of a medical brother. Instead of appearing and testifying as members of a common profession, the honor and dignity of which they are bound to protect, they improve the occasion to show to the world how futile are medical facts and observations; and instead of defending a professional brother from the malicious aspersions of character to which he is subjected in the performance of his duties, they join in the prosecution, and state their opinions in such manner as to prejudice a jury against the unfortunate defendant. The case alluded to is especially aggravating from the nature of the prosecution and the character of the medical evidence adduced. The following are the facts as given by a London contemporary:—

> "Dr. Waters gives, kindly and unfortunately, his gratuitous services, at his own house, to a hysterical female, the servant of one of his patients. He examines her with the speculum, finds superficial ulceration of the os uteri, and applies lunar caustic six or eight times. The woman is long under his observation. She at last goes to Malvern, where she comes under Dr. Gully's care, and complains of a swelling in her stomach, the nature of which was not appreciated by the extensive experience in hydropathy and homœopathy of the presiding doctor. Eventually, and to her great astonishment (?), the female is delivered of the tumor in the shape of a child. She had never had connexion, she swore, to her knowledge, with any man; therefore she must have been impregnated—in other words, raped—by Dr. Waters in his own house, on the occasion of one of her visits to him. She was, as her tale runs, made insensible during two hours by a potion administered to her by Dr. Waters, and in that condition the deed was effected. She named the time and day on which the thing was done. This was her statement, which the jury by their verdict, and the judge in his charge, pronounced to be an infamous lie. The woman was of the class of clever, cunning, hysterical impostors; and by her plausibility had won the complete confidence of her mistress, who, out of kindness to her servant, was determined to have justice done upon Dr. Waters. We need hardly add that there was not a shadow of suspicion attaching to Dr. Waters in the matter. He has been most cruelly subjected to an accusation to which every member of the profession is every hour liable. And therefore it is that he has especially the right to ask at the hands of his medical brethren their warmest sympathy and, if need be, pecuniary support."

The charge here made was of the gravest nature, affecting at once the honor of the profession and the moral character of a physician of hitherto good reputation. It would not seem possible that a medical man, having any regard for justice or for his own reputation, could be found who would consent to support such a prosecution by his testimony as a scientific expert. And yet three medical men were produced on the part of the prosecution, and all well known in this country as high authorities. They were Dr. Robert Lee, Dr. Ramsbotham, and Dr. Taylor. It is impossible to read the evidence of these witnesses without a feeling of deep mortification. We cannot divest ourselves of the impression that there is exhibited a singular want of candor and honesty, and a disposition to view the subject in a light unfavorable to the defendant.

Dr. Lee seems, indeed, to have taken the position of a public prosecutor. He declared that no ulceration of the os uteri had ever existed, and that the speculum had been employed for the purpose of seduction. He took occasion to denounce the use of the speculum, and it is stated, "after leaving the witness-box he conspicuously continued to display his disapprobation of the instrument by publicly exhibiting specula of various shapes and sizes in the body of the Court, before the judge and jury, and passing them round for the special inspection of the apparently much amused rows of barristers." A London journal thus justly comments on his testimony:—

"There is not an honorable mind in the entire kingdom that did not experience a sense of shame when reading the examination of Dr. Robert Lee. Gross in its levity and reckless in its assertion, as devoid of good feeling as it was deficient in scientific truth, it formed an exhibition than which anything more degrading to science and disgraceful to his profession cannot be imagined. It was gross in its levity, for Dr. Robert Lee forgot that the fame, fortune, and future of a man of equal reputation with himself were involved in his testimony, and selected such an opportunity for idle badinage and personal puff;—reckless in its assertion, because at variance with the experience and writings of men of the highest reputation. It was devoid of good feeling, inasmuch as the accusation was one that every right-minded man must have supported with pain rather than battled for with zeal;—deficient in scientific truth, if Dr. Robert Lee's own publications ten years ago are to be trusted, which he however declares (and in this we agree) are as destitute of authority as others now consider his present testimony to be. It was degrading to science and disgraceful to his profession, as involving the declaration that those who have spent their lives in medical practice and study, profit so little by their labors that they needlessly violate the sanctity of the female person in the gross abuse of an instrument admittedly necessary for the treatment of disease."

Dr. Ramsbotham supported Dr. Lee's theory, but in a much more subdued strain. Still, he spoke like one committed to a cause which he felt bound to sustain. The same is true of the testimony of Dr. Taylor. In spite of these eminent men who sustained the prosecution, the verdict of the jury acquitted the defendant. Thus ended a most malicious attempt to destroy the reputation of a medical man by means of scientific experts, who readily, we fear voluntarily, allowed themselves to become *participes criminis.*

The origin of nearly every trial for alleged medical malpractice may be traced to the reckless criticisms which rival practitioners pass upon the works of one another. Unguarded expressions in the presence of patients of doubt as to the propriety of methods of treatment, or open censure of the results attained, pass for positive opinions with the ignorant, and soon produce their legitimate effects in the prosecution of the attending physician. At the trial which follows, an accusing medical witness will always be found arrayed on the part of the prosecution, who is, in fact, as much a part of the prosecution as the attorney. His evidence is entirely *ex parte*, and he exhibits in the statement of his opinions all the adroitness of the legal counsel in making them bear against the case of the defendant. That this is the secret history of most prosecutions for malpractice every one must acknowledge who has witnessed many of these trials. The scene which is enacted in court is always most discreditable to those members of the profession who instigate the proceedings or who appear on the part of the prosecution. Their position is generally false both in fact and ethics, and sooner or later they reap the just rewards of their unprofessional conduct. It is not always the common practitioner who takes this stand against his neighbor. We have had notable instances of men eminent in special departments of practice, who have allowed the weight of their evidence to appear against a medical brother when their opinions were unsupported by facts. We have seen the fair fame of young physicians suddenly blasted, and a good name tarnished by the alliance of some opinionated "Professor" with the prosecution. We agree with the *British Medical Journal*:—

"It is high time that some serious steps were taken by the profession to put down this most unseemly persecution of medical men by medical men. How often have we not of late had occasion to refer to such scenes as these, where medical men too eagerly appear in court to assist in the blasting a brother practitioner's fair fame! The very fact of men in the position of Dr. Lee and Ramsbotham appearing in the case, gives an immense impulse to the accusation. Nay, we may even venture to believe that, but for their countenance, such an action as this could never have been brought at all. Is it not, indeed, reasonable to believe that their influence could have even arrested the action? Surely no men should know better than they how scrupulously cautious a medical man should be in accepting the one-sided statements of a clever hysterical female; and especially so when, as was evident, the blasting of Dr. Waters's fame would be the saving of her own reputation!"

THE WEEK.

Small-pox is epidemic in London, the mortality reaching as high as sixty-eight deaths weekly. At a late meeting of the Association of Officers of Health, the following statement was made:—

"The Association, having taken into their consideration the present prevalence of small-pox in London, deem it to be their duty to call the attention of the guardians of the poor and other local authorities of the metropolis to the subject. They regret to find that the epidemic is still on the increase. In some of the metropolitan districts, the mortality has already attained alarming proportions. It can scarcely be hoped that others equally populous will remain exempt, unless energetic measures are taken to arrest the further progress of the outbreak. While there can be no doubt that the prevalence of the disease is mainly attributable to the neglect of vaccination, and to the defective and unsatisfactory manner in which the operation is too frequently performed, and that if good vaccination were universal small-pox would be almost unknown, it is not the less apparent that the prolonged residence of infected persons in rooms occupied by others, the exposure of such persons in the streets, in public conveyances, or in the waiting-rooms in hospitals, and the absence of adequate means of isolation, have been the immediate agents in bringing about the recent rapid diffusion of small-pox."

The appointment of examining surgeons under the new conscript law has been made in most of the States. The selection comprises but few names of physicians well known in the profession. It is probable that too many appointments are purely political. The office is one of great responsibility, and the medical profession should have had its best qualified men selected.

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We intimated last week that it was important that the American Medical Association, at its approaching meeting, should select loyal officers. It has been rumored that among the aspirants for that high honor some were of doubtful loyalty. We trust there is no truth in the report, but it may be well for members to be apprised of it. No greater blow could be struck at the perpetuity of the Association than the selection of a President at this session of even doubtful loyalty. We quite agree with the Buffalo *Medical and Surgical Journal*:—

> "Aspirants for its chief honors are already quite numerous, and we hope that it may be bestowed upon those only who are true to themselves, the profession, and the country; that they may be at least *loyal to the country beyond suspicion*. Though we should most heartily oppose all action of a decidedly political bearing, yet we should regard it a disgrace to the profession and to the country, if the chief honors of the Society should be bestowed upon any one *suspected* even of disloyalty."

* * *

THE SEVENTEENTH ANNUAL MEETING OF THE
ASSOCIATION OF MEDICAL SUPERINTENDENTS
OF AMERICAN INSTITUTIONS FOR THE INSANE,
HELD IN THE CITY OF NEW YORK.

This meeting took place last week at the Metropolitan Hotel: last year the Association had met at Providence, R. I. If our recollection is accurate, the first meeting took place in the year 1844 in Philadelphia, and their importance has since always been increasing. In the same manner that the *American Journal of Insanity* preceded all periodical European publications on that specialty, similar institutions for medical officers of asylums, or else for psychopathists, were founded in the old world: whatever their names in England, Germany, and France, their object was, as here, to discuss theoretical and practical subjects of psychiatry, and to diffuse all material improvements connected with the management of asylums for the insane.

The several sessions held last week were attended by twenty-three members, amongst them several illustrious veterans, as Drs. Jarvis, Kirkbride, Ray, McFarland. Several papers were read, which elicited by their discussion most important results: one of them had for its object the much controverted questions on *moral insanity*. We are glad to understand that at last the meeting agreed to a conclusion: moral insanity was pronounced an unequivocal *mental disease*, presenting necessarily its pathological symptoms. No definite or accurate distinction being generally made between the motive of actions or causes of moral insanity depending either upon crime or disease, these cases offered great difficulties, and occasioned often perilous decisions in courts of justice; the Association objected, however, to the name of *moral insanity*, and rejected it as liable to mislead the jurisconsult, who might confound it with a mere perversion of sentiments or propensities, or with some irritability of the affective powers. Now it will be understood that moral symptoms, in order to have a real morbid signification, must be accompanied by unquestionable symptoms of insanity, recognisable by its physical manifestation. We consider this result of the greatest importance, not only for the so called *moral insanity* of criminals, but also to determine what is to be understood by unsoundness of mind in civil cases. It is evident that on the same principle that moral insanity must prove *to be* insanity, so *imbecility* must be proved an unsoundness of mind by the ordinary symptoms of bodily infirmity, and not be confounded with the various physiological degrees of human intelligence. Besides, supposing if there were no recognisable morbid symptoms of insanity, or of unsoundness of mind, physicians could never be of any assistance to juries and courts, and thus a criminal might as well escape punishment as sound people might be made fools, and deprived as such of their liberty and property; hence the well known perils of a commission *de lunatico inquirendo*. John Stuart Mill says in his last work *On Liberty*, page 132, that "there is something both contemptible and frightful in the sort of evidence on which any person can be judicially declared unfit for the management of his affairs. . . . All the minute details of his daily life are pried into, and whatever is found which, seen through the medium of the perceiving and describing faculties of the lowest of the low, bears an appearance unlike absolute commonplace, is laid before the jury as evidence of insanity." It is to be hoped that pathological signs will be required together with moral deficiencies to cause a man to be declared unable to manage his affairs on account of imbecility.

As the *American Journal of Insanity* is to publish the several papers read at the meeting, it remains for us to say that the convention had accepted the polite and kind invitation of the proprietors of the Flushing private asylum to visit their establishment, which visit took place last Thursday. The members, amongst whom several had visited the best European private asylums, found that none could surpass Sandford Hall, and accordingly expressed their opinion to Mrs. McDonald and Dr. Barstow. After having visited Flushing the company were taken to Blackwell's Island to visit the lunatic asylum in charge of Dr. Ranney. The members were much gratified with the appearance of the inmates, and also with the remarkable cleanliness that prevailed everywhere. Finally, the company, having crossed the East River, were taken to the Bloomingdale Asylum. Far from having decayed by time, the members found Bloomingdale in a most flourishing condition: a new wing had been added, which was partly in use for paying patients. Dr. Tilden Brown could see that his exertions had the unanimous approbation of his visitors, and he and Dr. Currie, his learned assistant, received the well merited congratulations of the company. As a true historian we must add, that the psychologists and their friends, many of whom had their ladies on this occasion with them, were not expected to live during that day only on pure mental food; at Flushing Asylum a most elegant and abundant *dejeuné à la fourchette* was prepared for their material comfort, and at Bloomingdale Asylum an analogous lunch permitted the *savants confrères* to feel that they had performed a duty to humanity under most agreeable circumstances.

* * *

Death of Dr. Charles Fishback.—It is with deep and sincere sorrow that we announce the death of Dr. Fishback, of Indianapolis. His death was from a dissecting wound, received, as we understand, in making a post-mortem examination of a puerperal fever case. The death of Dr. Charles Fishback is a loss to the profession of Indiana. He was high-toned in all his opinions and practice, one of the most active and zealous members of the State Society, an ardent worker for the elevation educationally of his profession, and above and beyond all a sincere Christian gentleman.—*Lancet & Obs.*

Medical Society in Gen. Granger's Army Corps.—The surgeons of all the regiments composing Gen Granger's army corps (near Franklin, Tenn.,) have formed themselves into a regular medical association.—*Lancet & Obs.*

Surgeon Hartmann, of the 107th Ohio Vols., was shot through the bowels at Chancellorville, and died of peritonitis.

Army Medical Intelligence.

SPECIAL ORDERS, No. 205.

War Department, Adj. Gen'l's Office.

2. So much of Special Orders 85, current series, from this office, as discharged Assist. Surgeon Asa Coleman, 46th Indiana Vols., to date December 26, 1862, is hereby revoked, he not appearing properly on the rolls, and therefore not recognised as having been in service, two Assist. Surgeons, independent of him, having been recognised and paid by the Government.

16. The following officers (published officially March 30, 1863) having failed to appear before the Military Commission, instituted by Special Orders No. 53, current series from the War Department, within the prescribed time, are hereby dismissed the service of the United States, to date March 30, 1863, for the charges set opposite their respective names :—

Absence without proper authority:
Assist. Surgeon John W. Goodson, 72d Ohio Vols.

Failing to report at Headquarters, Provost Marshal, under arrest, as ordered:
Assist. Surgeon James C. Basset, 29th Mass. Vols.

20. Hospital Steward James E. Post, is hereby discharged the service of the United States to receive promotion.

By order of the Secretary of War.
E. D. Townsend,
Assistant Adjutant-General.

The Medical Director of the Army of the Potomac has requested that for the present no civil physicians be allowed to visit that army.

Medical News.

SURGEONS UNDER THE CONSCRIPTION LAW.

Massachusetts :—*First district*, Dr. Foster Hooper. *Second district*, Dr. R. B. Hubbard. *Third district*, Dr. Joseph H. Streeter. *Fourth district*, Dr. Henry I. Bowditch. *Fifth district*, Dr. Daniel Perley. *Sixth district*, Dr. John L. Sullivan. *Seventh district*, Dr. D. S. Fogg. *Eighth district*, Dr. O. Martin. *Ninth district*, Dr. E. C. Richardson. *Tenth district*, Dr. Samuel Duncan.

New York :—*First district*, Dr. John Ordronaux. *Second district*, Dr. Geo. S. Woodman. *Third district*. Dr. N. L. North. *Fourth district*, Dr. James O'Rourke. *Fifth district*, Dr. Ernest Krackowizer. *Sixth district*, Dr. J. W. Powell. *Seventh district*, Dr. J. R. Vankleck. *Eighth district*, Dr. Geo. F. Woodward. *Ninth district*, Dr. W. H. Thomas. *Tenth district*, Dr. G. B. Upham. *Eleventh district*, Dr. John C. Boyd. *Twelfth district*, Dr. William H. Pitcher. *Thirteenth district*. Dr. A. H. Knapp. *Fourteenth district*, Dr. O. S. Vanderpoel. *Fifteenth district*, Dr. Charles S. Hubbell. *Sixteenth district*, Dr. George Page. *Seventeenth district*, Dr. Henry Hewitt. *Eighteenth district*, Dr. Uriah Potter. *Nineteenth district*, Dr. Sol. F. McFarland. *Twentieth district*, Dr. Edward L. Walker. *Twenty-first district*, Dr. W. A. Babcock. *Twenty-second district*, Dr. J. B. Murdock. *Twenty-third district*, Dr. John H. Knapp. *Twenty-fourth district*, not ascertained. *Twenty-fifth district*, Dr. Zara H. Blake. *Twenty-sixth district*, Dr. Samuel B. Foster. *Twenty-seventh district*, Dr. Joshua B. Graves. *Twenty-eighth district*, Dr. Azel Backus. *Twenty-ninth district*, Dr. Peter P. Murphy. *Thirtieth district*, Dr. John S. Trowbridge. *Thirty-first district*, Horace H. Glidden.

New Jersey :—*First district*, Dr. John R. Stevenson. *Second district*, Dr. Richard R. Rogers. *Third district*, Dr. Geo. R. Chetwood. *Fourth district*, Dr. William Pierson, Jr. *Fifth district*, Dr. Isaac A. Nicholas.

Maryland :—*First district*, Dr. William H. Farrow. *Second district*, Dr. J. R. Ward. *Third district*, Dr. Thos. F. Murdock. *Fourth district*. Dr. Chas. J. Barr. *Fifth district*, Dr. Robert E. Dorsey.

Illinois :—*First district*, Dr. J. W. Freer. *Second district*, Dr. Aaron Lewis *Third district*, Dr. Chancellor Martin. *Fourth district*, Dr. Chas. Coolidge. *Fifth district*, Dr. Thomas Hall. *Sixth district*, Dr. Robert McArthur. *Seventh district*, Dr. H. G. Johnson. *Eighth district*, Dr. Z. H. Whitmore. *Ninth district*, Dr. R. M. Worthington. *Tenth district*, Dr. David Prince. *Eleventh district*, Dr. F. R. Payne. *Twelfth district*, Dr. Henry W. Wing. *Thirteenth district*, Dr. Thos. H. Burgess.

Kentucky :—*First district*, Dr. W. H. Kidd. *Second district*, Dr. A. Weber. *Third district*, Dr. Byron Ryhng. *Fourth district*, Dr. R. B. Weinlach. *Fifth district*, Dr. T. S. Bell. *Sixth district*, Dr. E. B. Buckner. *Seventh district*, Dr. S. F. Gano. *Eighth district*, Dr. J. D. Foster. *Ninth district*, Dr. L. M. Buford.

Pennsylvania :—*First district*, Dr. N. H. Marselis. *Second district*, Dr. Robert W. Richie. *Third district*, Dr. Alexander C. Hart. *Fourth district*, Dr. J. Ralston Wall. *Fifth district*, Dr. E. F. Leake. *Sixth district*, Dr. Wm. Corson. *Seventh district*, Dr. R. H. Smith. *Eighth district*, not ascertained. *Ninth district*, Dr. Patrick Cassidy. *Tenth district*, Dr. James S. Carpenter. *Eleventh district*, Dr. Charles H. Humphreys. *Twelfth district*, Dr. Horace P. Moody. *Thirteenth district*. Dr. William S. Baker. *Fourteenth district*, Dr. George Letz. *Fifteenth district*, Dr. William S. Rowland. *Sixteenth district*, Dr. R. S. Seiss. *Seventeenth district*, Dr. A. Rothrick. *Eighteenth district*, Dr. James H. Dobbins. *Nineteenth district*, Dr. John Mechlin. *Twentieth district*, Dr. S. S. Bates. *Twenty-first district*, Dr. F. C Robinson. *Twenty-second district*, Dr. R. B. Simpson. *Twenty-third district*, Dr. John S. Kuhn. *Twenty-fourth district*, Dr. Robert D. Wallace.

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We understand that Mr. Van Nostrand, 192 Broadway, has in press, and will shortly publish, a "*Manual of Instructions* for the guidance of Examining Surgeons in determining questions of admission into or discharge from the U.S. Army. Prepared at the request of the U.S. Sanitary Commission by Dr. John Ordronaux, Prof. of Medical Jurisprudence in Columbia College, New York."

Deceased Surgeons of Ohio Regiments.—The following list has been furnished us, which will be read with interest. They make part of the roll of honorable dead.

Names.	Time of Death.	Regiment.
Surgeons.		
Brown, L C.	November 12, 1862.	Eighty-fifth.
Carlin, Wm. D.	January 26, 1863.	Fifty seventh.
McMeens, R. R.	October 30, 1862.	Third.
Pierce, Chas. R.	....	
Spillman, Henry	....	Fifteenth.
Assistant-Surgeons.		
Davenport, James	March 26, 1862.	Ninth.
Dean, Wm. T.	September 17, 1862.	Twenty-fifth.
Fisher, N. H.	January 25, 1862.	Fifty-sixth.
Lewis, John K.	October 14, 1862.	Forty-eighth.
Miner, J. N.	....	Forty-second.
Muenchér, Robt. P.	....	Seventy-sixth.
Norton, Greenleaf C.	October 11, 1862.	Forty-sixth.
Purple, John G.	May 13, 1862.	Twentieth.
Sayers, G. W.	....	Hundred and Second.

In the above list we observe the name of Dr. Jno. P. Haggott is overlooked.—*Lancet & Obs.*

Dr M'Gowan, known as a Chinese and Japanese traveller, is about to proceed on a journey through the mountainous districts of China and Formosa —*Brit. Jour.*

Military Changes.—By order of Gen. Burnside, Dr. L. H. Holden, late Director of the Department of Ohio, has been removed, and Dr. W. H. Church, of the General's staff, assumes the duties of Medical Director of the Department. Dr. Holden remains in the city awaiting orders. As soon as Gen. B. takes the field, Dr. Church will go with him. The executive duties of the office will devolve on Dr. J T. Carpenter, Surgeon U.S.V., and Superintendent of Hospitals in this city, Covington and Camp Dennison. He will be assisted by Dr. Holmes, Surgeon U.S.V., of Gen. Cox's staff.—*Lancet & Obs.*

Ohio State Medical Society.—The annual meeting of the Ohio State Medical Society will be held at the White Sulphur Springs, commencing on Tuesday, June 16, 1863. —*Lancet & Obs.*

The Pharmacopœia of 1860.—We have pleasure in stating that the stereotyping of this work is progressing rapidly, about 320 pages having passed the committee. Those unacquainted with the extreme care which is required to avoid errors or blunders, can hardly appreciate the amount of trouble which it has cost the committee, and especially the editor, Dr. Bache, so that not only shall no errors of sense be admitted, but that in language every part shall be consistent with the rest. Should no unforeseen delay occur, it is probable that the work will be ready before our next issue. The price will be at the much reduced rate of one dollar per copy, and it is greatly to be desired that every apothecary in the country, who has any regard for his profession, will obtain a copy, and use it as his guide-book for preparations. The process of percolation has been introduced most thoroughly, and the manipulation requisite to its conduction so carefully described as to leave no excuse for failure.—*Journal of Pharmacy.*

Original Lectures.

LECTURES ON DISEASES OF THE EYE.

By HENRY D. NOYES, M.D.,

ASSISTANT SURGEON N. Y. EYE INFIRMARY.

LECTURE IV.

DISEASES OF THE EYELIDS.—THE LACHRYMAL APPARATUS.

Blepharoplasty. — A partial or total loss of the eyelids may be produced by ulceration, by burns, by the removal of cancer, by wounds. The mode of repairing these deficiencies is by transplantation of neighboring skin. The entire lid may be formed in this way, but can only serve as a mechanical protection to the eyeball: the want of fibro-cartilage, as well as of the muscular apparatus, makes the substitute a very inferior one.

Sometimes not even this degree of relief can be afforded, as in a case which I saw a few months since. A young man, fifteen years old, had been burned several years previously; all the left side of his face had suffered severely, the auricle was gone, and all the skin had been destroyed. His features were dreadfully distorted by the contraction of the cicatrices; but his greatest distress was on account of the state of the eye. The lids had been partially burned off, and now their mucous lining was completely turned out and converted into a mass of fungous granulations. The eyeball was in continual irritation, and could not be covered by the lids. To obviate the suffering caused by dryness of the exposed globe, he wore upon it a bit of linen smeared with simple cerate. There was no healthy skin near enough to furnish flaps for new eyelids. I advised extirpation of the eye, for the cornea was hopelessly opaque, but he would not accept the proposal.

Cases of *partial* destruction of the lids admit of much relief. The same operations are practised as for ectropium, but the demands on the adjacent skin are more extensive. At the present time such operations are frequently called for to correct the deformities resulting from gunshot wounds. Oftentimes the eye has been destroyed, and the patient wants to be enabled to wear an artificial eye. There is usually adhesion of the soft parts to the bone, and, in operating for the formation of a new eyelid, extensive incisions are needed to loosen the skin from its attachments. But in making the flaps, whether by sliding or transplanting or both, they must be fitted in anticipation of the re-establishment of adhesion to the bone. It is of great importance to spare all that may be left of the conjunctiva and of the ciliary border. I cannot go into details of the flaps to be made, because every case has to be operated upon after a special plan suitable to its peculiar condition. Neither can you always determine the best plan until the adhesions have been liberated, or until after the removal of parts requiring excision; then you see how great a breach is to be provided for.

Ankyloblepharon. — The edges of the lids sometimes adhere to each other in consequence of burns, wounds, ulceration, and even from obstinate blepharitis ciliaris. A preternatural cohesion is sometimes congenital. The congenital form presents a furrow to mark the palpebral fissure, and only a thin membrane unites the ciliary border. The accidental adhesion may be more or less extensive.

That contraction of the palpebral opening which follows long continued granular conjunctivitis, is not what I now allude to. That does not occur by adhesion of the tarsal margins, but by shrinking of all the palpebral tissues. It has been christened by the formidable name of blepharophymosis.

Its relief by elongation of the palpebral fissure I have already described. Ankyloblepharon is a rare deformity, and is to be overcome by dividing the adhesion with a bistoury, and then to keep the edges apart by dressing the raw surfaces with collodion, or by passing a probe between them once or twice daily.

Symblepharon.—This is preternatural adhesion of the palpebræ to the globe. It is the effect of burns, as by caustic lime, melted metal, etc.; very rarely of simple ulceration. The cure of this condition is difficult, and its prevention is also difficult when the opposing conjunctival surfaces have been burned. If the eyelid is adherent to the globe by a broad surface, it cannot be permanently separated. If the adhesion be columnar, it is easily divided by the scalpel, and by frequent touching with nitrate of silver the surfaces may cicatrize without uniting. Another mode of operating is to pass a thread or wire through the adhesion near the cul de sac: let it be worn for a few days so as to form a permanent perforation, and then cut through the uniting band by tightening the ligature every day.

I recently saw a man who, nine years ago, had been hit in the eye by a bit of red-hot iron struck off the end of a rod by a blacksmith's hammer. The piece was about an inch long. It destroyed the eye, and produced perfect adhesion of the palpebræ to the eyeball and to each other. The ciliæ had been destroyed, and nothing was to be seen but the smooth external surface of the eyelids, continuous with the skin of the face. The destruction had been so complete that he suffered no other annoyance than the loss of the eye.

Pediculi.—Occasionally lice find a lodgment on the ciliæ. They are usually the body lice, *pediculi pubis.* Their ova will be found on the lashes like beads on a thread. I mention the fact to guard against confounding them with ordinary ophthalmia tarsi. Dalrymple gives a plate which shows their appearance very well. Mercurial ointment applied for a few days destroys them.

LACHRYMAL APPARATUS.

Anatomy.—The lachrymal apparatus consists of a secreting and an excreting portion. The secreting portion is composed of the lachrymal gland and the conjunctiva: the excreting portion consists of the puncta, the canaliculi, the sac, and the nasal duct. The lachrymal gland occupies a shallow fossa in the frontal bone at the upper and outer angle of the opening of the orbit. It is enveloped by the oculo-orbital aponeurosis, and is about the size of a large bean. It is concavo-convex, and is divided by a deep fissure into a greater and less portion; the latter sometimes called the accessory gland. Its structure is conglomerate like the salivary glands. It is constructed of acini lined by epithelium and enveloped by capillaries, the whole consolidated by fibrous tissue; the acini communicate with small tubules, which in turn unite into efferent ducts six to ten in number. These open into the external part of the superior cul-de-sac of the conjunctiva by minute orifices. The orifices are usually out of view, even when the lid is everted, but I have sometimes exposed them in persons whose eyes were very prominent. The secretion of the gland is water holding in solution about one per cent. of chloride of sodium and albumen. Moisture is also furnished to the eye by the conjunctiva. The excretory apparatus begins at the puncta lachrymalia, which are directed against the eyeball, and can be seen only by everting the lids. A fine probe entering the punctum will for a line take a vertical direction, and then passes horizontally for a quarter of an inch along the canaliculus until it enters the lachrymal sac. The canaliculi are lined by mucous membrane having a pavement epithelium, and they usually open by a common aperture into the lachrymal sac. The lachrymal sac is simply the expanded extremity of the nasal duct. It is about five lines long and two lines broad. Its walls nearly touch each other in the cadaver, and its cavity is a mere slit. It rises about two lines above the opening of the canaliculi. It is covered in front by the tendon and fibres of the orbicularis muscle, as well as by the skin; behind it are the fibres of the tensor tarsi. It lies in a groove channelled for it in the lachrymal bone. Its mucous lining is thick, covered by cylindrical epithelium, and studded with both simple and racemose follicles. The nasal duct is assumed to begin at the commencement of the bony canal through the superior maxilla. It is about half an inch long, and terminates in the inferior nasal fossa under the inferior turbinated bone, about three-quarters of an inch behind the orifice of the nostril. At the beginning of the nasal duct is a fold of mucous membrane, making an imperfect valve. At the middle of the duct another is sometimes found, as described by Hirschfeldt. Its inferior extremity is always overlapped by a fold of Schneiderian membrane, and the orifice is a mere slit. It is very difficult to penetrate the nasal duct from the nostril. The lining membrane of the lachrymal sac and nasal duct is a fibro-mucous tissue. It serves as periosteum to the bone which it covers, and also secretes a thick glairy mucus. Its mucous follicles are both simple and racemose, the latter quite abundant. Its epithelium is cylindrical. The most recent investigators do not admit the existence in it of ciliated epithelium.

Physiology.—Under ordinary circumstances the lachrymal gland takes little part in the lubrication of the eye: the conjunctiva furnishes moisture enough for this purpose. This is proved by the sufficiently moist state of the eye in cases where the lachrymal gland has been extirpated. So, too, excretion by the lachrymal passages is ordinarily very small in quantity, because evaporation suffices to carry off the excess of fluid. This is shown by what occurs when the sac and duct have been obliterated. When, however, the surface of the eye is irritated by wind, smoke, dust, or foreign particles, the lachrymal gland pours out an abundant flow: the derivative apparatus comes into active play, and is often taxed to more than its capacity. The manner in which tears are conveyed away has long been controverted. A great variety of theories have been broached, and many of them contradictory. Suction, aspiration, capillary attraction, etc., have been invoked, but unsatisfactorily. The real difficulty has been in the want of exact knowledge of the action of the muscles of the eyelids. A very careful study of this subject has been made by Dr. Henke, and is reported in the Archives for Ophthalmology, Band iv., Abth. 2, page 70, 1858. The essential points are as follows:—When the eyelids are open the lachrymal sac is shut; its walls lie in contact. The eyelids close by contraction of the palpebral portion of the orbicularis, whose fibres are inserted into the internal palpebral ligament and into the anterior wall of the sac. As the lids close, the internal palpebral ligament is made tense and lifted forwards, and the lachrymal sac is opened. The same action lifts the lower lid a little off the globe at the inner canthus, forming as the tears are pushed along a lacus lachrymalis. The puncta are bathed in the fluid, and by the same muscular action of closing the lids it is forced into them and onwards through the canaliculi into the opened sac. The orbicularis relaxes, the lower lid drops, the upper lid is lifted by the levator palpebræ, and then the tensor tarsi comes into play. It lies behind the sac, and is inserted by two horizontal processes into the border of the lids as far as the puncta. It contracts at the same moment with the levator palpebræ, prevents regurgitation by the puncta, and forcibly closes the sac, pushing the collected fluid downwards into the nasal duct. The removal of tears is thus the result of muscular action. It seems to me that the valve which covers the inferior extremity of the nasal duct may aid the conveyance of tears by preventing the entrance of air, as by contraction of the orbicularis the sac is opened: a partial vacuum will occur in the cavity of the duct and sac, which will invite the tears to enter the puncta at the same time that they are propelled into them by the closing lids.

Diseases.—The lachrymal gland is rarely the seat of disease; it has been known to become scirrhous, and it is sometimes acutely inflamed. At M. Desmarre's clinique I saw a patient with acute inflammation of both lachrymal glands. Symptoms of its influence will be the situation of the swelling, the redness of the conjunctiva, and the tenderness on pressure. Treatment mildly antiphlogistic. It is in the *derivative* apparatus that the great trouble arises, and such derangements are abundant. The symptom of which patients complain is, that tears stand in the eye or overflow the cheek—*epiphora.* This symptom is common to all lachrymal diseases. But it would be an error to regard epiphora as always evidencing lachrymal disease; and it is equally erroneous to suppose that, when the name epiphora has been pronounced, the real disease has been discovered, and it only remains to order some drops for the eye. Much of the discredit and dissatisfaction in treating lachrymal diseases arise from slovenly diagnosis. Patients may have epiphora because of palpebral conjunctivitis: it excites an undue secretion of tears, while there will be no obstruction of the escape passages. On the other hand, chronic influence of the lachrymal passages provokes palpebral conjunctivitis, and there will then be both an excess of secretion and obstruction to elimination. It becomes necessary to examine both the conjunctiva and the lachrymal passages to determine the cause of epiphora. There may be defects in the puncta, in the canaliculi, in the sac, and in the duct.

The *puncta* are often displaced. They fail to come in contact with the globe, but look upwards or forwards. This eversion results from laxity of the eyelids, from paralysis of the orbicularis, from chronic inflammation of the tissues of the lid, from growth of tumors. In old persons, the skin becoming loose and the orbicularis feeble, the puncta are not held in contact with the eye. This is specially true of the lower lid. If tears prove annoying, the puncture may be enlarged by slitting it up, and if the lid be still too loose to force the tears away, a wedge-shaped piece may be excised from the lid to shorten it. The piece may be removed from the middle or outer portion of the lid, the base of the wedge being at the ciliary border. Thickening of the lid from ophthalmia tarsi, lippitudo, or conjunctivitis, often pushes off the puncta. Treatment consists in slitting the lower canaliculus up to the caruncle, and endeavoring to reduce the thickening of the lid by proper applications. The latter endeavor may be unsuccessful because of the inveteracy of the malady, but the first expedient will afford much relief. Simply slitting the canaliculus is not always enough; the posterior wall of the tube may need to be removed with scissors, and if eversion be great, a bite taken out of the conjunctiva adjacent to the canaliculus. This will tend to turn the new openings inwards as cicatrization occurs. Eversion of the puncta from tarsal tumors will be relieved by their removal.

The canaliculi may be obstructed. As a rare occurrence, a minute chalky concretion deposited from the tears blocks them up. The dacryolith will be felt by the probe, and may be cut out with a cataract knife. Mr. Dixon observes that a cilium sometimes gets into the punctum. The canaliculus may be narrowed at some point by stricture. This will be discovered by passing a fine probe. For such an exploration, I prefer Bowman's fine probe-pointed director to the silver probe. It is stiffer, being of gilded steel and tapering. It may be used as a dilator. Such strictures yield to a few introductions of probes. Mr. Bowman proposed to divide them within the tube by a minute sheathed knife, on the same principle as the urethrotome. If a stricture be hard, or if the patient be disinclined to the repeated passage of probes, I have no hesitation in laying open the canaliculus in the usual way. This little operation is a cure for many of the causes of epiphora, and is preliminary to treatment of almost all cases of lachrymal disease. It is not always easy to do it satisfactorily, because of the forcible shutting of the eyelids. One may not have an assistant to call upon; it is desirable, therefore, to have one hand free to control the lids, while the other does the operation. The use of a fine grooved probe and a cataract-knife requires both hands. The operation may be done with fine scissors, but the canaliculus cannot be opened to any desired extent, because of the rapid increase in thickness of the blades. It is easy with scissors to divide the punctum and vertical portion of the canaliculus, but the horizontal part cannot be extensively divided. It is desirable to open the tube up to the caruncle and even into the lachrymal sac. The easiest way to do it is by a fine probe-pointed bistoury. I have used two sorts, one whose blade is very narrow, and which cuts after it has been pushed into the canaliculus by elevating the handle while the point is fixed as a fulcrum. I have also had another knife made in which the blade is much broader, and juts over the probe point in a rounded shoulder: this cuts as it is pushed along. I find both these forms useful. In doing the operation, the patient should sit in a low chair facing the light, the surgeon standing behind and supporting his head. If the lower canaliculus is to be opened, the fingers of one hand must draw the ciliary border outwards and downwards, to expose the punctum and keep the eyelid tense. The patient should be directed to look upwards and outwards. With the other hand the probe point of the knife is entered vertically into the punctum, and when fairly engaged, the handle brought down to the horizontal direction, and the blade pushed rapidly along the canaliculus as far as it can be made to go. With the broad-bladed knife the section is now completed; with the narrow-bladed knife the handle must be lifted up while the point is held fixed, and in this movement the canaliculus will be laid open. If the patient do not convulsively shut the lids, the narrow-bladed knife will do the operation very well; but if the lids are tightly squeezed together, the blade which cuts as it is pushed, is more certain to do the work.

The next day after the operation a probe must be run through the cut to prevent it from uniting, and the same thing may be needed a second time. This operation does not disfigure the face, and is not open to any physiological objections. Tears pass off as readily by the slit as by the natural punctum.

There are many cases in which it is indispensable to divide the canaliculus through its whole length: as for eversion produced by chronic conjunctivitis, or by ophthalmia tarsi; also, to introduce the largest sized probes into the ductus ad nasum. I am satisfied that no inconvenience results from this free division in any case, and that a less extensive division is sometimes very insufficient. I shall allude to this point again.

Original Communications.

CAN SYPHILIS BE PROPAGATED THROUGH VACCINATION?

By W. C. OTTERSON, Surgeon U.S.V.

The phenomena of inoculation and of the more modern and much improved practice of vaccination, have been pretty closely studied by the profession in all its phases. Much discussion has arisen in regard to the powers of transmitting certain diatheses and diseases by the means of vaccine disease. Although the profession have been a unit on the *desirableness* of procuring good and healthy virus, yet there has been, and still is a large and respectable class, who contend that the discriminating powers of nature reject what may be bad, and carry *only* the healthy constituents of the virus, and that the virus will pass through a system impregnated with vices, and leave them to carry on their work where found, without doing more than sometimes stirring up the morbid principle to active operation. Others argue that many diseases can be, and are transmitted by this means, and that the various forms of scrofula, and other constitutional taints, may be ingrafted by vaccination. Which party in the controversy carries the greatest weight, I am unable to say. My own opinions may be gathered from a perusal of this article. I propose to introduce to the notice of the profession a series of phenomena in connexion with vaccination, to which my attention has just been called, entirely new to me.

I.—On the fifteenth day of June, 1862, Lieut. H., of the 18th Regiment Ind. Vol. Infantry, presented himself with the following history of his case: Age twenty-six, married, always been in good health, been in the service of the U.S. about a year, was vaccinated on March 20th; no effect was noticed until about the tenth of May; during this period the regiment marched about three hundred miles; the weather was very rainy, the mud and streams very deep. No particular difficulty was experienced. The arm at the end of forty days began to inflame, attended with scaly patches over the chest and arms. At the same time a painful condition of the joints developed itself, beginning with the shoulder and arm of the side on which the virus was introduced, extending to the knee-joints and tendons; and has frontal headache, *increase* of *pain* in the *afternoon* and fore part of the night, while it passes off towards morning. The cervical glands are enlarged and tender. Throat sore, having a flabby congested condition of the posterior fauces, but no ulceration. Irritation in nearly the whole spinal column. Bowels regular. Appetite varying. Tongue clean on edges, in the centre covered with light brown fur. Pulse 90 and irregular, indicating a morbidly excitable condition of the nervous system. Has a tingling numb sensation in the right arm and leg "as though it were asleep." Sight is blurred; has ocular spectra. The cicatrix on the arm is irregular in shape, and the size of an old shilling; it has a dark unhealthy look, and an areola extending an inch and a half in diameter, the color as though it had recently been painted with a weak tincture of iodine.

II.—Richard Taylor, age twenty-seven, private in the 18th Regiment Ind. Vol. Infantry, was vaccinated about the middle of March; had always been healthy up to this time; had no rheumatic trouble. On the sixteenth of June has still on the arm an ulcer with everted edges, the size of a quarter dollar, involving in depth the true skin and part of the subcutaneous areolar tissue; the surface is very red, with exuberant granulations that bleed upon the least touch; arm is quite painful. Three months have now elapsed since the virus was inserted; it remained latent thirty-five days before the arm began to inflame. At the same time he was seized with a painful affection of the left hip, knee, and leg, with numbness, always increased in the after part of the day and fore part of the night, on account of which can sleep very little till after midnight. Spinal irritation in the cervical and upper dorsal vertebræ. Had no fever; appetite poor; has lost flesh; has taken no medicine; difficulty appears to be confined to the left side; copper-colored spots on legs, without being characteristic. III.—Seth Wagner, aged twenty-nine, private 18th Regiment Ind. Vol. Infantry, vaccinated with the same virus that was used in the other cases. Six weeks elapsed before any evidences of its taking appeared, and when it did, it was attended with painful condition of hip and shoulder, soon followed by scaly patches on chest. Has never had rheumatism. No treatment. IV.—Capt. Jones, 18th Regiment Ind. Vol. Infantry, vaccinated about 20th March, but showed no signs of taking till first of May. About May 15th was taken with painful affection of the knee, ankle, arm, and shoulder; some febrile action; a little tendency to intermit. Was treated by the Regimental Surgeon by a mercurial purge, followed by quinine; took colchicum without improvement. Improved rapidly on the use of iodide of potassa, the latter having produced its characteristic eruption; pains in bones, and frontal headache increased at night. V.—John M., aged twenty-two, single, 18th Regiment Ind. Vols. Infantry, vaccinated about March 20th, began to feel his arm inflamed on May 8th; health had always been good. Arm was healing, when lameness began in shoulder, elbow, knee, and wrist of same side; no increase of pain in after part of the day. Has improved on the use of iodide of potassium. VI.—Harvey S., good constitution and health previous to the development of symptoms following the vaccination, its latent stage being about the same as the others. The pains began at the time the arm healed; elbow, knee, and wrist affected; increase of pain in the after part of the day. Had no eruption on the skin, or sore throat. VII.—W. M.—Same history. Pains began at the time the arm healed; scaly eruptions on the body; pains more severe in the after part of the day; frontal headache; never had rheumatism before. VIII.—B. C.—History nearly same. Frontal headache increased decidedly in the after part of the day; enlargement of the cervical glands; has tubercular eruption on the skin; throat sore, but no ulceration; the cicatrix on this man's arm is about the size of a dime, elevated about the thickness of a quarter dollar; the surrounding surface is red, and contains fluid, probably grumous blood; this arm never ulcerated, this being the extent of the local effects. IX.—J. M.—Same regiment, history much the same. Arm was healing when pain and stiffness began in shoulder, elbow, and wrist; *no* increase of pain in after part of the day; *no* eruption or sore throat; has improved on the use of iodide of potassa, though has not taken it long enough to get its full effects.

The history of the vaccine virus, so far as can be obtained, is, that it was taken from a man who had been in hospital, and while convalescing from typhoid fever and pneumonia, was vaccinated. The scab taken from his arm was the article used in these cases, all of which were undoubtedly spurious. The man went home on a furlough, and was absent during the incubative stage of his vaccine. He had been vaccinated when a child. The disease was tardy and irregular in its progress, and he had, after it healed, and before the march was made, some rheumatic trouble, almost entire loss of power in the arms; had no skin disease or night pains. Another interesting fact is that out of three hundred cases that were vaccinated only eighty were affected with the vaccine, all of whom had nearly the same train of symptoms as described. In most of these cases there was sore throat, but nothing to indicate *it was specific;* many of them had skin disease, none of them but what were of such a mixed character that they threw little or no light on the subject: some were scaly, some were vesicular. The onus of this morbid action has been on the fibrous structures, the nervous system, and the skin; sometimes the mucous membrane and glandular system have been involved, but the rheumatic element has been the predominating one in the train. The question arises—Had the man chancre from whom this virus was taken at the time the vaccine disease was running its course, contracted during the incubation of the vaccine? If so, did these diseases run their course in his system *pari passu?* What influence, and how far would the march, exposure, and fatigue, these men suffered, modify, retard, or alter the vaccine disease? Strict inquiry was made in all these cases in regard to their having the primary disease; they aver they never had, and from their answers to questions indicate they had never had any secondary symptoms, a condition of things that would hardly obtain among men who had been treated by a country surgeon without some exceptions. From the evidences before us, are we justified in the conclusion that these cases were inoculated with matter taken from a subject who, at the time the disease was in progress, was suffering with chancre, and thus call this *syphilitic rheumatism,* the type of the disease being syphilitie instead of vaccine? The development of secondary and tertiary symptoms, as to time, would seem to indicate that such was the case. If this is the fact, the constitutional vices *can* be transmitted from a diseased to a healthy subject by means of vaccination. The child who is sent into this breathing world as the last act of a mother who has phthisis or cancer, being vaccinated, that virus, on being introduced into the arm of a perfectly healthy subject, may it not receive with the vaccine disease the seeds of an insidious malady that, under proper circumstances, may develop the same disease that obtained in the woman from whose child this virus was taken? These are grave and important questions, and I know will be answered most promptly in the negative by many of our "*first men,*" but unfortunately our "*first men*" do not always hold to the same theory, and, therefore, sometimes *must* be in error. The men who had this disease from sore arms were nearly all the cases of rheumatism in the regiment. None of them had been so affected before. There were no cardiac complications so far as my investigations extended. In the treatment of these cases the iodide of potass was the only remedy that offered any relief—this almost without fail did. As soon as the system began to feel its influence the patient began to improve. As yet the time has been too short to know what the ultimate results of treatment may be. So far as my recollection and reading extend this whole subject is one that is as new as novel, although the subject of syphilitic inoculation has been tested in all shapes and forms. The complication, as suggested in this paper, is one that I have not met with: there is one thing very evident, that in *these* cases there were no traces of the *genuine vaccine* disease, and it is not at all probable that these were anything more than *poisoned wounds.* What was this poison if *not* syphilitic? And if syphilitic, why is it that these patients were not all affected in the same manner? Ricord answers this partly, who says, "All the reported secondary symptoms are far from being specific; but the infection by the venereal virus may produce in the system disturbances, lesions, and the development of morbid symptoms resembling those which another non-specific cause might also have caused." In almost all these cases there was sore throat (but not ulcerated), glandular enlargements, particularly the cervical; pain increased in the after part of the day and evening. In some, frontal headache; in many, eruptions of various kinds on the skin. In the regiment there were very few cases of rheumatism besides those described. If the crude and incomplete relation of these cases gives rise to investigation and inquiries tending to throw light on this subject, or demonstrate what may be known as a fact, I shall be glad to have made the inquiry—Have we syphilitic rheumatism from the causes indicated? Since the above was written several cases of ophthalmia from the same regiment have presented themselves, in all of whom I have found the iris involved. I have ordered some of these men in hospital to be treated by different agents, the results to be carefully noted. If possible, at some future period, I will give to the world the results.

HEADQUARTERS, ARMY SOUTH WEST,
BATESVILLE, ARK., June, 1862.

ERYSIPELAS,

AS IT OCCURRED IN HOSPITAL NO. 10, NASHVILLE, TENN.

By DEWITT C. DAY, M.D.,

ACT. ASS'T SURGEON, U.S.A.

IN November last Medical Director Swift established an Erysipelas Hospital in the City of Nashville, in which I acted as Assistant Surgeon.

The extensive lecture halls of the Medical Department of the University of Nashville were used as wards for the sick. An abundance of fresh air was thus secured to the patients, the windows permitting of free ventilation both at top and bottom.

We have had, since the establishment of the hospital, upon an average about seventy-five patients daily in the wards. These patients were sent from General Hospitals in this city, and from camps in its immediate vicinity.

It will thus be seen that our opportunities for observation have been by no means meagre, and with the hope that some member of the profession will still further investigate the ideas we advance, we have been induced to offer the following remarks for publication:—

Recognised as erysipelas has been from the early eras of medical science, it is a subject of astonishment that, at the present day, so little is known in regard to its real nature, causes, and treatment.

Nosologists thus far have not been able to give it a definite classification; some place it with the *Exanthemata,* others with the *Phlegmasiæ.* Linnæus chose erysipelas as the prototype of the eruptive fevers, but denied its contagiousness, although in many respects it resembles measles, scarlatina, and small-pox. That the disease depends upon a specific poison, is scarcely susceptible of doubt, but of the real nature of this poison, where and how generated, we are yet ignorant.

A large majority of the patients, coming under our observation, were stricken in hospital while laboring under, or convalescing from other diseases, most generally measles, chronic diarrhœa, and typhoid fever. It seems to be a rule, not, however, without exceptions, that the disease delights to seize and prey upon patients in whom, from some cause, the *vis vitæ* has become enfeebled.

As to its contagious or non-contagious nature, the profession is yet undecided. Our observations, so far as they go, indicate its contagious nature. But few of the nurses employed when the hospital was first established, escaped. Those nurses who had been detailed into hospital as unfit for field service, with but few exceptions, fell victims to the disease. Robust healthy men most generally escaped: but two or three of this class took the disease. In erysipelas, how far the general law obtains, that all diseases having a tendency to putridity induce a corresponding condition in the bodies of those predisposed to be so affected, and in contact with such diseases, we know not, but believe it to be highly probable. One fact we think is pretty firmly established, that OCCLUSIS favors the development of the disease.

We have by careful examination of cases in hospital endeavored to definitely settle what tissues were really affected in this disease. Many maintained, and no one supported the idea more strenuously than Mr. Lawrence, that the skin and subjacent cellular tissue were the true and only seats of the disease, and that the peculiarities of this inflammation were mainly due to the modifications in structure of the parts affected. We believe that much is true in regard to the last proposition, but observations do not permit us to give assent to the first. Ocular demonstrations, made upon several hundred cases, prove satisfactorily to our mind that, in a large majority of cases, the disease first makes its appearance upon the mucous membrane. The analogy existing in the forming stage of erysipelas and the idiopathic eruptive fevers, is quite striking. It will be remembered that the eruption of measles and scarlatina always appears upon the mucous membrane in advance of the external manifestations. In a majority of cases the same phenomenon may be demonstrated in regard to erysipelas.

Mr. Lawrence states, that facial erysipelas but seldom involves the mucous membrane of the air passages. In the cases coming under our observation the reverse obtains: most generally the patients are affected with a cough and sore throat. An examination shows the fauces to be in an inflamed condition. Finally, the inflammation emerging, curls over the lip or alæ of the nose, and the true skin becomes involved.

It is acknowledged that, in many respects, the skin and mucous membrane are homophysic structures. In some of their functions they are nearly allied; and to the diseases that attack one, the other is peculiarly susceptible. The analogy existing between the skin and the mucous membrane is much more striking than that existing between the skin and subjacent cellular tissue. If this be true, it is not strange that the disease should select as its seat either one of the above tissues. That it attacks the mucous membrane primarily in a majority of cases, may be accounted for upon the principle of its greater susceptibility to such attacks.

It has been stated that the inflammation occurring in mucous membranes during an attack of erysipelas, has but one characteristic sign of the disease under consideration, namely, redness. We are told that ulceration is a frequent sequence, but that swelling and vesications are absent. It needs but a little reflection upon the anatomical structure of the two membranes, to give a satisfactory solution to the question. The absence of vesications upon the mucous membrane does not prove that it is not affected with true erysipelatous inflammation. Vesications rarely occur upon the skin, and then only in the mild form of the disease. So far from being essential to the disease, they are mere mechanical products, consisting of effused serum held down by the epidermis. Hence, when we have a mild attack involving only the true skin, vesications occur, but in all attacks involving the subcutaneous areolar tissue, effusion of serum takes place in the meshes of that tissue, and œdema is the result.

The absence of swelling in the mucous membrane may be readily accounted for upon the principle, that the mucous membrane rapidly throws off the serum, the product of inflammatory action, from its surface. In an attack in which the skin only is involved, we do not have swelling, because this depends upon an effusion in the areolar tissue. Hence, in an inflammation occurring in a mucous membrane, and not involving the submucous cellular tissue, we should expect, *à priori*, that the effused serum would be readily thrown off, thus preventing infiltration and consequent œdema. Should the inflammation, however, extend down and involve the submucous areolar tissue, which is sometimes the case, we would undoubtedly have swelling, which we have repeatedly witnessed. We have seen patients in this hospital almost asphyxiated, so great was the infiltration in the submucous tissue.

Mucous membranes may be affected not only primarily, but involved by the extension of the inflammation from the true skin. Dr. Bouling has clearly demonstrated the existence of erysipelatous bronchitis, pneumonia, and diarrhea, occurring in patients in this hospital. I have seen the same diseases attack patients laboring under erysipelas under circumstances that could not admit of a rational doubt as to the individuality of the complication. The reason of this is susceptible of easy explanation. If we have established the fact that mucous membranes may be attacked with erysipelatous inflammation, it would follow as a consequence that the vesicular mucous membrane of the air passages, or the intestinal mucous membrane, would as readily take on erysipelatous inflammation as the fauces.

The characteristics of a common case of pneumonia will, for the most part, apply to a case of erysipelatous pneumonia, except that in the latter the symptoms are more aggravated from the beginning of the attack.

A soldier was shot in the arm at the battle of Stone's river. The arm was amputated near the shoulder-joint. Erysipelas took place in the wound, and he was admitted into this hospital. The patient was over six feet high, with quite a robust body. No symptoms of pneumonia upon admittance. He was placed in a ward kept at an equable temperature. He was treated with wine, a generous diet, and the topical application of the tincture of iodine. After the lapse of a few days the inflammation faded out in the vicinity of the wound, which was doing well, but spread rapidly over the chest and back. Suddenly, without any assignable cause, he was attacked with pneumonia. As the external signs of erysipelas faded out, so in the same ratio did the pneumonic manifestations increase. The disease would not respond to remedies, and the patient died. In this case the patient had not been exposed to alternations of temperature. He had been watched by a careful nurse, and the time that had elapsed since his admittance into hospital showed conclusively that previous exposure could not have acted as an exciting cause. The only rational solution of the question is that, as the erysipelas faded out upon the skin, it was re-kindled in the mucous membrane of the vesicular structure of the lungs.

Another patient was admitted into hospital with erysipelas of the forearm. An abscess, formed which was opened, and discharged about half a pint of matter. The erysipelas spread up the arm, finally over the whole of his back and chest, and nearly over the entire surface of the abdomen. He was treated pretty much as the former case. Notwithstanding the inflammation was so diffuse, the constitutional symptoms were by no means discouraging. He remained in this condition several days. Finally, the redness began to disappear from the skin, and we congratulated ourselves that our patient would soon be well. This hope, however, was delusive. Pneumonia set in almost simultaneously with the decrease of the external symptoms, and the patient died. We might report numbers of cases of erysipelatous pneumonia occurring in this hospital, were it necessary.

What we have said in regard to erysipelas of the vesicular mucous membrane of the lungs, applies with equal force to the mucous membrane of the intestinal canal. We have seen great numbers of cases of erysipelatous diarrhœa as the result of the impress of the poison upon the gastro-intestinal mucous membrane.

The diarrhœa resulting from erysipelatous poison, does not differ materially from the common diarrhœa, save in the obstinacy with which it resists the action of medicines. In cases occurring in this hospital we have employed the usual treatment for diarrhœa without any beneficial effect whatever.

Bronchorrhœa and otorrhœa are frequently present in attacks of erysipelas. Upon an average over half our patients have been thus affected, showing conclusively that the mucous membrane is very susceptible to the impress of this poison. We think it highly probable that the poison of erysipelas often escapes from the system through the agency of a broncorrhœa or otorrhœa, thus preventing an open attack of the disease. Nurses and others exposed in an erysipelas ward have frequent attacks of this description.

We are far from believing that the mucous membrane is always involved in attacks of erysipelas. Upon the contrary, we have seen many cases in which the disease was apparently confined exclusively to the skin. It may, however, be stated as a law, that attacks originating primarily from, or by extension involving mucous membranes, are much more serious in their nature than those attacks located in the skin or cellular tissue.

We have never seen the constitutional symptoms aggravated by an extension of the inflammation over a large surface of the cuticle, so long as the skin alone suffered from the attack. Large suppurating abscesses are more rare in such cases, at least among those patients coming under our observation. In fact, there is but a small zone of skin in which active inflammatory action exists. As the red wave advances in its march over the skin, *pari passu*, the inflammation behind fadés out. Hence there is a division of labor. Before the inflammation exists in any one locality sufficiently long to produce disintegration, another part becomes involved. It may be stated as a general law, that in those cases in which the nervous symptoms predominate over the vascular, the tendency to death is much greater. Such cases often bear a striking resemblance in some of their leading symptoms to typhoid fever. The coma is sometimes very deep. It is hard to fix the attention of the patient. Sometimes the reverse obtains, and a wild delirium is exhibited. The patient will jump from his bed, and endeavor to run about the ward. The tongue and teeth are usually covered with glutinous black sordes, which sometimes require considerable trouble to remove. From such symptoms an unfavorable prognosis may be generally surely given. Costiveness has always proved to be a favorable condition in this hospital. Patients who were costive during the disease but rarely died.

Secondary and tertiary attacks of erysipelas are of frequent occurrence in our hospital. Whether these attacks are the result of fresh contagion, or the responses of some of the old poison still lingering in the system, are questions yet *sub judice*. These attacks rarely cause much constitutional disturbance. They are most generally confined to the skin, seldom dipping down into the cellular tissue. The attack rarely lasts more than three or four days.

Treatment.—So many contradictory opinions are held in the profession in regard to the nature and cause of erysipelas, that it is not strange that an equally vacillating treatment should be pursued. We are recommended by some to bleed the patient profusely in the beginning of the attack; to open the bowels and arouse secretion by a large dose of calomel. We are told that by pursuing this course of treatment the disease may be often averted. We do not know: we have never tried the treatment, and never will, unless our ideas in regard to the disease should undergo a radical change. We apprehend that no one ever averted a case of erysipelas by such a course of treatment.

The question presents itself—Can any good be accomplished by depletion? Were we influenced alone by the authority of names, this might be a difficult question to decide. Venesection has been highly extolled as a remedy in erysipelas. Some have gone so far as to assert that if timely brought into requisition the disease might be averted. This treatment, as we have already remarked, cannot accomplish such a consummation. It is irreconcilable with the modern idea in regard to the nature of the disease. It is to all intents and purposes a self-limited disease, depending upon a poison that in some way fastens upon the system. The fever is not symptomatic, as many have contended of the external inflammation, but, as in the idiopathic fevers, a morbid result of the impress of the poison upon the system. The disease is manifestly one of those that tend to a rapid destruction of the vital powers—Why still further lessen the chances of recovery by bloodletting? One or two applications of the lancet cannot change the morbid condition of the blood left in the system, or prevent the formation of more of the same character. Our ideas should be directed to an alteration of the whole quantity, and as this idea cannot be carried into practical effect by means of any known drug, we treat the disease as we would any other self-limited fever—*watch it*, and support the patient.

We should reject emetics in the treatment of erysipelas upon the ground that they tend to prostrate the patient, and can be of no possible benefit.

Purgatives are liable to the same objection, and, further, that they increase the already irritable condition of the intestinal mucous membrane. We have already stated that our costive patients almost without exception recovered; hence, we have been slow even to administer aperients, lest we should produce in the patient a condition unfavorable to recovery.

Muriated tinct. of iron, so highly approved by the profession, has utterly failed to accomplish any good in our hands. We gave it in ten drop doses every two or three hours. One surgeon remarked to us that he gave forty drops every two hours in cases coming under his charge, and attributed its failure in our hands to the fact that we gave an insufficient quantity. We finally concluded to stop its use for a few days. Our patients did better—there was less disturbance of the bowels and stomach. Latterly we have not used it at all. Before abandoning its use, however, we gave it a fair trial.

Quinine, we believe, is positively hurtful; to say the least, it has never benefited our patients, unless a malarial diathesis existed.

Local Treatment.—We commenced treating erysipelas in this hospital with the firm conviction that the topical application of the tinct. of iodine or nitrate of silver would not arrest the spread of the inflammation. Subsequent experience has demonstrated to us that the latter may limit its progress. We have already said that our observations held us out in the opinion, that the diffusion of the inflammation over a large surface of the skin was not absolutely hurtful. We have also stated that, in our opinion, the great danger in erysipelas lay in its involvement of some vital organ. Hence we have doubted the propriety in many cases of arresting the outward signs of the disease. No one would think of arresting the eruption of measles, scarlatina, or small-pox, and the question naturally presents itself—What beneficial results do we gain by stopping that of erysipelas? We have never been able to decide this question from observation. We strongly incline, however, to the opinion, that the application of these remedies will be finally abandoned by the profession.

In our treatment of erysipelas in this hospital, we have long since abandoned the idea of any specific remedy, and base our principal hope for recovery upon supporting the strength of the patient until the disease shall have spent its force. We have the wards constantly well aired. Disinfectants are also freely employed. We have the floors of the wards thoroughly scrubbed four times a week, and enjoin a frequent change of linen. In addition, we watch the advent of any untoward complication. We have found wine and brandy two of our best supportives. The greatest attention should be given to the patient's diet. Milk, eggs, corn bread, butter, tender beef-steak, beef-tea, potatoes, etc., should constitute the principal food used. We have also been in the habit of letting the patients use canned fruit freely.

As a topical application, solution of plumbi acet. is very grateful. We frequently use collodion. Unsalted pig's lard is a very fine application.

When an abscess forms, the pus should be immediately let out by free incisions. Also, extensive infiltrations of serum in the cellular tissue should be evacuated.

Progress of Medical Science.

ON THE USE OF NITRIC ACID IN THE CURE OF ULCERATION OF THE OS AND CERVIX UTERI.

PREPARED BY E. H. JANES, M. D.

The treatment of ulceration of the os and cervix uteri by the local application of pure nitric acid is not altogether new, but is employed freely by some successful practitioners of this and other cities. The subject, however, has received a strong confirmation in a communication to the *British Medical Journal*, by Mr. Hammett Hailey, formerly house-surgeon to the Midland Counties Lying-in Hospital, which is of sufficient interest to deserve the attention of those who have never tested the employment of this well known powerful agent. The cases reported by him he divides into two classes:—1. Cases of cancerous ulceration, or disease with apparent malignant tendency, where the ulcer is large, excoriated, discharging pus or matter of a muco-purulent character, in conjunction with great derangement of the general health; in fact, every symptom of cachexia. 2. Cases of simple ulceration or excoriation, with or without hypertrophy, accompanied by symptoms not quite so distressing to the general health. The first case reported occurred in the year 1850. The patient for fourteen months had been gradually losing flesh, with pains in the back, sickness, loss of appetite, perspirations, constipation, and slight cough. She had been treated for pulmonary disease by a private practitioner, and had undergone a digital uterine examination in a neighboring infirmary. On examination with the speculum, the uterus was found prolapsed, and the os imbedded in a mass of muco-purulent discharge (although the patient used daily alum injections), on the removal of which, both labia of the os uteri were found extensively ulcerated some distance up the cervix. Prescribed liberal diet, vegetable tonic with iodide of potassium, and local application of nitrate of silver. At the end of two months, there being little or no improvement, both the local and general treatment were changed. The ulcerated parts were first washed with a moist sponge and freed from all discharge, and the diseased portion then painted with pure nitric acid, and the speculum retained *in situ* for half an hour, for the purpose of preventing the acid from injuring the adjacent parts. She was also directed to take twenty minims of the tincture of the sesquichloride of iron twice a day. At the expiration of a fortnight the excavated portions of the ulcer were found quite filled up, and the whole disease presented a healthy appearance. The acid was again applied, and the same treatment continued for about two months, when the patient's health was quite restored. Three years afterwards she was confined with her seventh child, when no symptom of uterine mischief was present, neither did there appear any cicatrix to interfere with the proper function of the os uteri. Other cases of the same kind are reported, together with a number of a more simple nature, all showing the superiority of this to other applications. The use of the speculum is defended, and the benefit derived from it illustrated in the report of a case of about two years' duration, attended with great emaciation, vomiting after meals, cough, loss of appetite, diarrhœa, fainting upon the slightest exertion; and every symptom of cachexia. This patient had undergone digital examinations, and consumed gallons of injections of lead and alum; yet, on examination with the speculum, the vagina appeared red and inflamed, the os uteri was incased in a layer of thick muco-purulent matter, on the removal of which, the labia of the os could not be defined, but the whole cervix appeared one mass of ulcerated disease, bleeding upon the slightest touch, yet she recovers strength, and is restored to her original health and vigor so as to be able to pursue her usual occupation, that of a washerwoman. Taking for his text a remark of Dr. Bennet, that "the only treatment to be depended upon, is one of such stimulation of the ulcerated part as to modify its vitality in such a manner as to induce a healthy action, and finally cicatrization," he reviews briefly the merits of the various substances hitherto used for that purpose. The nitrate of silver, though for a long time the favorite in general practice, and in a majority of instances used successfully, is still very uncertain, and requires constant repetition, very much to the annoyance of the patient and to the dissatisfaction of the surgeon. He objects to the actual cautery and potassa fusa on account of the great constitutional irritation often attending their use, while he is unwilling to add to the repugnance that women already have to the use of the speculum, by the addition of the electric battery to that delicate region. He disposes of injections in a few words, as being in a great majority of cases only vaginal, hardly ever reaching the os uteri, and useless except as cleansers of the vagina, or for affording temporary relief in the form of an opiate. He speaks of the acid nitrate of mercury as a valuable remedy, but one that requires a greater number of applications than the pure nitric acid. In cases of cancer of the uterus, when the stage of ulceration has commenced and hæmorrhage made its appearance, the acid will be found the safest and most styptic application for arresting its progress. It is applied with a glass brush all over the diseased os, and allowed to penetrate its cavity; the speculum is retained until every chance of the adjacent mucous membrane being touched is over, and on its removal the vagina plugged with wool. The application may be repeated once in ten or twelve days until the cure is effected. Three things are necessary to effect a cure, viz. a full view of the diseased surface, supporting the general health, and the application of a powerful escharotic, touching the external portion of the os uteri, and dipping full into its cavity. "Armed with the tincture of the sesquichloride of iron as an internal, and the pure nitric acid as an external remedy, the practitioner need never despair of fulfilling these intentions."

The Iodine Test for Diabetic Urine.—The value of the iodine test for diabetic urine, as proposed by M. Trousseau, has been disputed. It appears, in fact, that healthy urine decolorises iodine when added to it, only it does so less rapidly than diabetic urine. It would appear, from observations made by M. Corvisart, that the decolorising of the iodine tincture depends chiefly upon the action of the uric acid and the urates in the urine; and, consequently, that the decolorising power of the urine, whether diabetic or not, is measured by the relative quantity of these salts in the urine. If it is demonstrated that this power resides preeminently in diabetic urine, it will then be necessary to learn the relative quantity of those salts which are contained in it.—*British Medical Journal.*

FOREIGN CORRESPONDENCE.

LETTER XXXVI.

By PROF. CHARLES A. LEE.

VENICE, AS A RESORT FOR INVALIDS, ITS TOPOGRAPHY, PHYSICAL HISTORY, HEALTHINESS, ETC.

VENICE, Oct. 15th, 1862.

WE have seen that the Queen of the Adriatic is a compact city, built on piles in the midst of a lagune, on nearly a hundred mudbanks just rising above the surface of the water, divided into two parts by the Grand Canal, which is crossed by three bridges only, the Rialto of stone, the others iron: each part made up of many small islands, and these islands again separated from each other by canals (*rii*) running in every direction, and crossed by several hundred very narrow and steep bridges, cut into easy steps, so that the foot-passenger, in finding his tortuous way along the many foot-paths (for they can hardly be called streets) from one part of the city to another, is constantly going up and down flights of steps, the Rialto being the highest, as it is also the steepest. Having spent many days in a gondola exploring these canals and the many palaces and buildings fronting upon them, I found it impossible to overcome the feeling of sadness which involuntarily creeps over the mind, as the memory of its past glory and magnificence contrasts its former splendor with its present ruin and decay. Not in a single instance did I hear the song of the gondolier, nor scarcely any sound, except, occasionally, his strange, warning cry, "Ah, eh," as he turned the sharp corner of one canal or street into another; no recitation of Tasso's verses; no loud talk; no laughter; no ladies on the balconies, nor heads at the windows; no curiosity to see who or what was passing. A melancholy silence brooded over all, while a grim, stern, savage, defiant expression of features seemed the predominant characteristic of the entire native male population. The iron rule of the Emperor Joseph is either expatriating the citizens or driving them to despair, desperation, or madness. To see this proud city, its once handsome marble palaces literally "crumbling to the shore," now occupied as government stores, casernes, offices, or let out to strangers; attempts at restoration or repair, few and far between; its ancient nobility and patrician families extinct, or represented by beggars, it is impossible to check the inquiry—What has produced this mighty change? Has it been physical, or moral and political causes? To be satisfied of the latter, we need not search the 8,664,000 volumes and portfolios constituting the archives of Venice in the Convent of the Trani, or the 65,000 volumes and 5,000 manuscripts in the Great Council-Chamber.

The Venetians, though of a bilio-nervous temperament, easily excited and easily depressed, have lost much of the ardor, courage, and enthusiasm which formerly characterized them as a nation. From some cause or other they have sunk down into a very ordinary, commonplace kind of people; but its historical associations, the topography and peculiarities of the city, will always attract strangers to the spot, and render Venice one of the most interesting cities of the world.

It has been remarked that there seems to be a mysterious attraction between hectic patients wandering after an *ignis fatuus*, and various desolate and woe-begone cities in the south of Europe, as Pisa, Rome, and Venice. I can testify that, so far as the latter city is concerned, the remark is literally true. It is now early in October, and already many English and some American invalids, with pulmonary symptoms, have taken lodgings here for the winter, the chief attractions being the mildness and equability of the climate, and the belief, sustained by the chemical researches of Cenadella and Pisanello (1847), that the air is impregnated with emanations of *iodine* and *bromine*, so generally recommended in this class of affections. The native as well as foreign physicians, resident here, magnify these advantages, overlooking the well known fact that tuberculosis is one of the most common and fatal diseases amongst the native inhabitants. But then the magic of its name, its romantic history, its splendid ruins, and its galleries of paintings and sculpture, have also great influence in attracting invalids hither; and I have seen patients in every stage of consumption, to whom *change of scene* has been recommended as of equal importance as change of climate, impelled by a morbid curiosity or a contagious sight-seeing mania, seeking out, from morning till night, the works of Titian; the frescoes of Tintorello and Paul Veronese; the statues, palaces, temples, and mausoleums of Sansovino and Palladio; or those horrible, damp, dismal, dark dungeon cells, the Piombi and the Pozzi, in the vaults of the Ducal Palace, over which the boats on the canal pass, and with whose history so many tales of horror are connected. Now, though I fully believe in the value of change of scene in pulmonic diseases, I cannot subscribe to the benefits of roaming at all hours about old, damp ruins, cold churches, long picture galleries, empty palaces, or any other places where the air is likely to become stagnant or impregnated with noxious exhalations. A connoisseur in bronzes, pictures, statues, and architecture, or the antiquary trying to decipher half-worn inscriptions on the mouldering walls of some ruin or dungeon, will not be very likely to pay much attention to the climate and atmospheric conditions by which he is surrounded. I have known two Americans, in the last stage of phthisis, spend many successive hours, standing on the cold sunken floor of the basilica of St. Mark, breathing its damp and impure air, examining the mosaics, sculptures, basso-relievos, and arabesques with which it is profusely ornamented; or the gilded arched roofs, the pavement of jasper and porphyry, the five hundred columns of black, white, and variegated marble, of bronze, alabaster, verde-antique, and serpentine, unconscious at the time of suffering or fatigue, but at an expense of vital force which it required many days to repair. The mild, balmy air of Venice, so soothing, and apparently healing in its influence; the freedom from dust; the gentle, sleep-provoking, gondola exercise, so particularly adapted to consumptive patients; the abundant markets, supplying almost every variety of fish, flesh, and fowl; the bright skies, and freedom from noise, all these are advantages which cannot be disputed: but it is questionable whether they are not counterbalanced by the evils already mentioned.

A city built on a group of mudbanks, in the midst of a lagune, surrounded with swamps and marshes, would seem to be not very favorably situated for health or pleasantness. But notwithstanding the offensive effluvia from some of the canals during the heats of summer, I cannot learn that there is any great amount of sickness. Intermittents, of not a very severe grade, are not uncommon in spring, and in August, September, and October; but epidemic fevers rarely if ever prevail. The periodical fevers, I am told, have not the malignant character of agues arising from ordinary marsh malaria, and seldom leave, as sequels, enlargement of the spleen or liver. No doubt they are caused by the exhalations from the canals, though some physicians here believe they are mainly produced by the great difference of temperature between day and night, acting upon constitutions relaxed by summer heat, and the humid condition of the atmosphere. They are far more prevalent in the islands than in Venice itself. Although bleeding is so generally practised, inflammatory diseases are singularly mild, and combined with much nervous irritability. I am surprised to find so great a prevalence of nervous and convulsive affections, both in males as well as females, and among all classes, high and low. The causes are, doubtless, to be sought for chiefly in the peculiarities of the climate, aggravated by the indolent and inactive habits of the people acting on nervous temperaments. Hence also the great frequency of pulmonary and scrofulous complaints, which generally take on a very chronic form. Apoplexy is a very common disease, and ossification of the arteries frequently met with. Herniæ are extremely common, owing to the relaxing influence of the humid climate; and owing to the same cause, wounds and ulcers heal slowly.

We should suppose, *à priori*, that exhalations from the numerous canals in summer and autumn would create a great amount of sickness, but such is not the case; as they are generally very narrow, deeply incased between the walls of the houses, and their muddy bottoms scarcely ever exposed to the atmosphere. Besides this the tide ebbs and flows twice a day, carrying out organic matters far into the Adriatic, so that little miasma can be formed from decomposition, and then the great prevalence of north-east winds carries away from the lagune any unhealthy emanations which may exist in its vicinity. The topography of Venice must be studied in connexion with its climate, and both as related to its salubrity. What is called *the lagune*, in which Venice is situated, lies at the north-west extremity of the Adriatic, is of an oval form, about thirty-three miles in its greatest diameter from north-east to south-west, and from six to twelve miles in its other diameter; being bounded from the north-east to the south by the main land, and from the latter a strip of land extends north with some interruptions so as to cut off all communication between Venice and the sea except by their openings. The *Lido* or maritime boundary is thus formed by a series of small islands, on the eastern aspect of which are the *Murazzi* or great sea walls, the object of which is to protect the long sandy spits that separate the lagune from the Adriatic from the inroads of the latter. They consist of a great embankment of huge blocks of Istrian stone, rising eighteen feet above high water, presenting an inclined surface outwardly or in the form of stairs: the whole length of the *Murazzi* is about three miles and a quarter. They were commenced in 1741 and completed in 1782. The width of this pyramidal structure at its base on the level of the sea is forty-five feet. These openings between the islands serve the purpose of sluices, always free, through which the waters ebb and flow daily. The cold winds from the Julian and Carnatic Alps thus sweep across the north-east extremity of the lagune, which is not much sheltered against their influence, if at all; and as these winds are the predominant ones, they tend greatly to scatter any noxious exhalations which may be found. The more elevated Alps on the north serve to shelter the city to a great extent against the northerly winds, while the mountain range which skirts Lombardy serves also to shield it in a great degree against the west and south-west winds. The only winds which have full sweep over the lagune are the Sirocco or south-east, and the east, coming from the sea. The winds which principally influence the climate of the lagune are, thus, the north-east, the east, and the south-east; the north and the west being the least frequent, owing to the barrier caused by the elevation of the central Alps and the adjoining summits. Now, besides the small canals which I have mentioned, there are three large canals, the *Guidecca*, *Canal'e Grande*, and *Canal'e Regio*, intersecting the city in different directions, so that both land and sea breezes traverse the whole extent of the city without interruption, thus securing a free circulation of air, and contributing greatly to the salubrity of the place.

Meteorological tables kept by the *Atheneum* of Venice show that the mean temperature of winter is 38° F., that of spring 56° F., that of summer 72° F., and that of autumn 56° F.; the annual mean is 56° 75′ F. At Padua, the winter mean is 36° F., and that of Milan is 34° F. It is admitted that Venice is the warmest medical station on the Adriatic coast of Northern Italy, and that the temperature rises as we approach the sea, and falls in proportion as we advance towards the foot of the Alps. And what is still more important to the invalid, the variations of temperature between the mean maxima and minima at Venice are on a much more limited scale than in the principal towns of Northern Italy, and even many places in the South. For example, the variations in the winter season are only 52°, whilst at Padua they are 56°, at Milan 55°, at Pavia 60°, at Florence 59°, at Rome 59°, and at Palermo the same; a range of from four to nine degrees in favor of Venice* There are no sudden transitions, either, between the different seasons, and the variations during the spring, summer, and autumn, are nearly the same in each season, viz. 57°. It is this favorable distribution of heat throughout the year that places the Venetian climate, in this respect, before most other southern climates.

American Medical Times.

SATURDAY, JUNE 6, 1863.

ARMY MEDICAL INSPECTION.

One of the most important features in the organized Medical Department of the Army was the Bureau of Medical Inspection. The progress of the science of military hygiene has led other nations to establish a corps of inspectors, whose duty it is to visit camps and hospitals, with the sole purpose of improving their sanitary condition. The most marvellous improvement in the health of armies has followed the inauguration of a system of rigid sanitary surveillance. During the late war in China the English troops maintained, even in unhealthy districts, a better average of health than the people of England at large. With the organization of our immense armies it became a matter of the very first consequence that a similar system of sanitary inspection should be established in connexion with the Medical Department. An act was duly passed into a law creating such a Bureau with ample powers. The success of this scheme depended primarily upon the organizing and executive force of the chief officer; and secondarily upon the efficiency of the corps of inspectors. The appointments were to be made by the President and Senate, and it became a matter of great interest to determine who should be selected for these positions. Of course political influence entered largely into the canvass, but did not materially affect the result, except in the selection of the Inspector-General. To the surprise and mortification of the true friends of the public medical service, the whole question of qualification in his case seemed to be set aside, and mere political availability alone consulted. The person appointed was unknown to the profession. To the inquiry as to the antecedents of the appointee, no information was elicited. It was rumored that he had a friend at Court, and that the appointment was a political *quid pro quo*, or one of those arbitrary selections of officials without regard to the public interests with which the secret history of every administration abounds.

It was feared that the whole scheme of sanitary inspection had been seriously compromised and perhaps sacrificed by the selection of an incompetent executive officer. When it was recollected that medical men of the very highest qualifications were placed prominently before the appointing power, and that their claims were ignored, though the Ac tprovided expressly that the selection should be made solely on account of merit, great and justifiable indignation was felt at the manner in which the public interests were trifled with. Still, there was a strong disposition manifested to withhold criticism, and give the new organization a fair trial.

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* At Albany, U S., N. Lat. 42° 39, the extreme range of temperature (for twenty-one years) is 120°; the mean monthly range 67° 5′; and the mean annual range 100°; annual mean 48°; highest degree 97°; lowest degree 23° F.

A year has passed, and we are now able to form an intelligent judgment of the success of this department of the medical service of the army. The corps of medical inspectors have, in general, faithfully and intelligently performed the duties assigned to them. Camps and hospitals have been regularly visited, and reforms have been instituted and abuses corrected. Valuable reports have been made, which might serve as the basis of perfecting the organization of this system of inspection, and give completeness and efficiency to all its details. But they are lost to the Bureau itself. Its chief executive officer, the Medical Inspector-General, has, as was anticipated, proved to be destitute of those qualifications necessary to its proper organization and direction. His administration of its affairs has proved a wretched failure. He has not comprehended the true design of the service, and of course has not given it proper scope or direction. As in other branches of the public service where the demon of politics has dictated the appointment, so in the Sanitary Bureau imbecility is the chief characteristic of the highest official. Practically, indeed, the department of medical inspection does not exist, as the Inspector-General is not, we believe, recognised by his superior officers, and the corps of inspectors is under the immediate direction of the Surgeon-General.

It is exceedingly painful to be under the necessity of reflecting so severely upon a medical officer occupying a high and responsible public position. But the interest which the profession has felt in the success of the system of sanitary inspection of the army compels us, as journalists, to expose the character of its chief medical officer, and comment with due severity upon his official conduct. We are far, however, from pronouncing this organization for medical inspection a failure. Through the enlightened zeal of the individual members of the corps, and under direction of the Surgeon-General, great good has been accomplished. The comfort and health of the troops in every section of the country have been largely promoted by the wise counsel of the inspectors' corps. But the full measure of usefulness of this branch of the medical service can never be realized until a competent and energetic executive officer shall give proper scope and direction to its details.

THE WEEK.

The "Soldiers' Home," an institution chartered by the last Legislature of New York, has been organized by the appointment of a Board of Trustees. We learn that the Trustees will meet at once and take measures to raise funds. It is estimated that two hundred thousand dollars can be raised by private subscription. It is proposed to establish an institution, which, for the soldiers of the State of New York, shall supply the place of the Hotel des Invalides in France, and the Chelsea Hospital in England. The act of incorporation states the object of the institution to be, to provide "a home and maintenance for officers and soldiers who have served, are serving, or may hereafter serve, in the volunteer forces raised or furnished by or from the State of New York, who by reason of wounds or other disabilities received or produced in the service of the United States, or of the State of New York, shall be unable to support themselves, and all who, having been honorably discharged, shall be decrepit or homeless in their old age." The flags of the different regiments, on their return from the war, are by law to be deposited in the Home. The institution is to be managed on military principles. The practical management is to be intrusted to officers and soldiers who have received an honorable discharge, preference being given to those partially disabled. The citizens of Auburn have tendered a site not exceeding 300 acres in extent, provided the institution is located there.

Queen Victoria and some members of her family have recently visited a hospital, and the English Journalists express their admiration of this act in the most extravagant terms. The Queen seems to have manifested an interest in the arrangements of the hospital, and inquired in regard to them, and even spoke to several patients. "She was very gracious, and her voice was beautifully clear and sweet." * * * "Prince Alfred looked quite strong and robust." * * * "The Princess Alice spoke to several of the soldiers' wives." * * * "Prince Louis also seemed both interested and pleased." Such royal condescension has justly astonished the English nation. But in this country we regard such courtesies paid by the Ruler to the soldiers as but a duty, and unworthy of comment. We have seen President Lincoln passing from bed to bed in our military hospitals, and greeting the soldiers with a hearty shake of the hand. There was nothing in the act to excite our astonishment; nothing in his personal appearance or voice to excite our admiration. It is probable that Madame Victoria and Father Abraham will appear at about the same advantage in the respect which they showed to the soldiers of their respective Governments on the page of impartial history.

The profession will learn with much gratification of the selection of Prof. Alden March, of Albany, New York, as President of the American Medical Association for the ensuing year. Fears had been entertained that, through improper influences, a person might be selected to that position unworthy of the confidence of the profession on account of his disloyal proclivities. But we are now relieved of all apprehension, and we welcome the election of Prof. March as the best evidence that the Association is to continue its career of usefulness with undiminished vigor and influence. We must congratulate Prof. Percy, of this city, on the honor of obtaining the prize of the Association for his essay on Veratrum Viride. It will prove some compensation for the time and labor which he has expended in the experimental investigation of the properties of this agent.

It is with unfeigned regret that we announce the death of Dr. John Watson. To his personal friends his death was not unexpected. He has long suffered from malignant disease of the rectum, which compelled him to retire from business several months since, and finally proved fatal on Wednesday, June 3d. Dr. Watson has long occupied a prominent position in the profession, both as a writer and practitioner. His loss will be seriously felt by his numerous friends and associates.

AMERICAN MEDICAL ASSOCIATION.

Fourteenth Annual Convention, held in the City of Chicago, June 2d, 3d, and 4th, 1863.

The Fourteenth Annual Convention of the American Medical Association commenced in this city to-day. At the opening of the session 141 gentlemen were in attendance. It is expected that the medical skill of the country will be ably represented, and that the session will be one of unusual interest and practical value in its relation to the sanitary wants of the country. The meetings are held at Bryan Hall. The opening session was called to order at eleven A.M. by the first Vice-President, Dr. Wilson Jewell, of Penn., supported by Vice-President Dr. A. B. Palmer, of Michigan. The Secretaries, Drs. S. G. Hubbard, of Conn., and H. A. Johnson, of Illinois, were also present. Prayer was offered by the Rev. R. L. Collier, pastor of the Wabash avenue M. E. Church.

The welcome address was delivered by Dr. N. S. Davis, of this city, Chairman of the Committee of Arrangements, to the following effect. Dr. Davis welcomed the members to the city of Chicago. They had heretofore met in cities at the East, where years of improvement had wrought more perfections than in Chicago, but here were all things pertaining to those cities in their incipiency. He could point to our great granaries, our great commercial interests, our schools, our universities, and our every element of civilization, where recently the Indian and untutored life was rife, with pride. New as Chicago is, she is not behind the age. The same patriotism, friendship, and harmony of interests exist, and he welcomed them to all the hospitality which Chicago could afford.

Which address was followed by the following report of the Committee of Arrangements:—

The unusual duties and responsibilities which have devolved upon the committee, since the meeting at New Haven in 1860, seem to require a brief explanation, in addition to the usual report, on this occasion. Early in the year 1861, the usual notices for the regular meeting on the first Tuesday in June, of that year, were issued, and the committee had made all the preliminary arrangements for its accommodation, when the sectional animosity and wickedness which had been threatening the peace of our country for several years, culminated in an open, unjustifiable, and monstrous rebellion. In the midst of the universal excitement which followed, the committee received numerous letters from active members of the Association, some of them embodying the action of local medical societies, all asking earnestly for a postponement of the general meeting for one year. These letters were from every section of the Union, including the cities of Boston, New Haven, New York, Troy, Albany, Philadelphia, Cincinnati, Louisville, Nashville, St. Louis, and Detroit. A special meeting of the committee was held, and all these letters, together with similar sentiments expressed in the medical periodicals, were submitted for examination.

Although there is nothing in the constitution or by-laws of the Association, authorizing either the officers or the committee of arrangements to postpone a regular meeting, yet the extraordinary condition of the country, and the apparent unanimity of sentiment in favor of such action, constrained the committee reluctantly to issue a notice that the annual meeting would be postponed until the first Tuesday in June, 1862. About the time for issuing the notice for the meeting in 1862, the severe battles of Belmont, Fort Donelson, and Shiloh, followed each other with such results as to require the attention and active assistance of large numbers of the profession in the north-west, and at a meeting of the committee the chairman was instructed to correspond with members of the Association in the several cities heretofore named, and obtain further advice before issuing any notice. The instructions were complied with, and of a large number of letters received in reply, all but two earnestly recommended another postponement. At a subsequent meeting the committee being satisfied that these letters afforded a fair index of the sentiments of the profession generally, unanimously instructed the chairman to issue notices, announcing a further postponement of the meeting until the first Tuesday in June, 1863. These successive postponements were fully endorsed by almost every medical journal in the country. No further action was taken by the committee until February, 1863. On the thirteenth of that month the chairman of the committee received official notice from the secretary of the Medical Society of the State of New York, that at the regular annual meeting of the Society held in Albany during the first week in that month, a resolution had been adopted unanimously in favor of holding a meeting of the American Medical Association at the regular time and place, specified in the last notice of postponement, namely in Chicago, on the first Tuesday in June, 1863, and requested the committee of arrangements to issue the customary notices for such meeting without delay.

About the same time the American Medical Times in New York, and the *Medical and Surgical Reporter* in Philadelphia, strongly recommended the same course of action. The committee was convened on the evening of the 14th of February, and being satisfied that the foregoing action of the New York State Medical Society, and of the medical periodicals named, indicated a general change of sentiment in favor of resuming the regular meetings of the Association, a vote was passed unanimously instructing the chairman of the committee to issue the usual notices for the annual meeting of the Association, and to engage the necessary hall for its accommodation. Accordingly notices were immediately printed, and before the 1st of March copies had been mailed to all the medical periodicals in the country; to all the members of committees, both standing and special; and to many other members of the Association. The committees have been gratified to find that the call for the present meeting met the warm approval of nearly all the medical periodicals in our country, while in only *one* have they observed a decided expression of disapproval. Whether the action of the committee has been right or wrong, judicious or injudicious, we know that it has at all times been actuated by one single desire, namely, to comply with the actual wishes of the profession, and to perpetuate the existence of the Association with ever increasing activity and usefulness. In the spring of 1861 persevering efforts were made by the committee to effect an arrangement with the several important railroad lines to make some commutation of fare to such members as should attend the proposed meeting of the Association in this city. During the present season, these efforts were repeated, but in both instances the uniform answer of railroad officers was: that they were prohibited by direct conventional agreements, from entertaining any proposition of the kind. The committee have been informed that at a meeting of railroad officers in Buffalo, on the twenty-ninth day of April last, such influences were brought to bear as caused them to make the *canal enlargement convention*, now in session in this city, an exception to the rule against commutation of fares, while all other applications for the same purpose were denied. For further information on this subject, the committee refer to an announcement which will be made at an early hour by the local secretary of the Association. Notwithstanding all the disagreements which have existed, the committee are happy to announce that the number of delegates and permanent members whose credentials have already been furnished, and their names enrolled, is such as to indicate a large and profitable meeting. The list of names will be read at the calling of the roll by the secretary.

In conclusion, the committee recommend, that after the adjournment of the meeting this afternoon, the sessions of the Association be continued each day as follows:

General session from 9 A.M. to 1 P.M.

Afternoon sessions in sections from 3 P.M. to 6 P.M.

Seats will be reserved in the gallery for ladies during all the general session in Bryan Hall. All of which is respectfully submitted.

Signed N. S. Davis,
Thos. Bevan,
E. Andrews,
H. W. Jones,
Committee.

Dr. Catlin, of Connecticut, moved that the report be accepted and approved, which was carried.

The Secretary, Dr. Hubbard, of Connecticut, called the roll of delegates and permanent members, who had registered their names, only a very few being absent.

Vermont.—Drs. J. N. Stiles, Lewis Emmens.

Massachusetts.—Drs. Benj. Cutter, Appleton Thorne, Edmund Barton, Jas. P. Lynde, Ebenezer Stone, P. J. Kendall, B. E. Cotting, John Homans, John C. Dalton, M. D. Southwick, E. R. Abbe, John Green.

Connecticut.—Drs. Stephen G. Hubbard, L. N Beardsley, R. H. Catlin, A. W. Barrows.

New York.—Drs. Henry G. Davis, Guido Furman, Alden March, Danl. P. Bissell, Jas. S. Whaley, Thos. C. Brinsmade, C. C. F. Gay, Jenks. S. Sprague, Edward Stork, Edmund S. F. Arnold, E. W. Cherry, W. N. Blakeman, Howard Townsend, H. Nicholl, E. Tobie, H. S. Downs, C. C. Wyckoff, Alf. Underhill, John H. Griscom, L. B. Cotes, Julius Homberger, C. H. Harvey, Jas. McNaughton, Danl. Holmes.

New Jersey.—Drs. W. Pierson, Jr., D. M. Sayre, John Blain, Isaac S. Cramer.

Delaware.—Drs. H. F. Askerd, Jas. Cooper.

Pennsylvania.—Drs. Wilson Jewell, W. Mayburry, E. Wallace, B. Richardson, John R. Thomas, E. M. Mason, W. L. Richardson, S. N. Troth.

Virginia.—Dr. J. C. Hupp.

Ohio.—Drs. W. S. Battler, J. M. Taggert, W. W. Jones, A. H. Agard, K. G. Thomas, S. O. Almy, L. N. Lawson, W. B. Davis.

Indiana.—Drs. B. S. Woodworth, A. M. Vickery, A. J. Erwin, A. P. Ferris, L. D. Personett, Jas. Ferris, S. A. Freeman, L. D. Glazebrook, Jas. F. Hibbard.

Michigan.—Drs. A. B. Palmer, E. A. Ezzery, H. O. Hitchcock, S. D. Richardson, Lewis Davenport.

Illinois.—Drs. E. L. Holmes, Geo. K. Amerman, Edward Andrews, John Ten Broeck, C. R. Parks, T. D. Fisher, Geo. W. Hall, Dav. Prince, E. Andrews, N. Wright, W. O. Chamberlain, J. P. Rouse, E. A. Steele, A. Fisher, M. J. Johnson, J. H. Hollister, D. Pierson, M. F. Derrith, S. Wirkester, J. D. Rose, Henry Winz, Chas. Gorham, S. W. Noble, Ira Hatch, T. F. Worrell, T. P. Haller, H. A. Johnson, R. Spitler, G. Pasli, H. Noble, D. M. Parker, Orrin Smith, A. J. Conine, T. K. Edmiston, J. J. Lulee.

Wisconsin.—Drs. Chas. L. Stoddert, H. Adams, Harman Van Dusen, E. S. Carr, Geo. D. Wilbor.

Iowa.— Drs. J. W. H. Baker, Saml. C. Lay, Jos. Sprague, D. L. McGuggin.

Kansas.—Drs. D. W. Stormont, C. A. Logan.

Tennessee.—Dr. W. K. Bolinz.

ARMY AND NAVY DELEGATES.

Dr. C. C. Cox, Baltimore, Med. Dept., U.S.A.; Dr. G. Simpson, Baltimore, Med. Dept., U.S.A.; Dr. A. R Terry, Chicago, Med. Dept., Marine Hosp.; Dr. John B. Porter, Chicago, Pension Office Examiner; Dr. Henry Palmer, York, Penn., York Army Hosp.; Dr. M. K. Taylor, Keokuk, Iowa, Gen. Hosp., Keokuk; Dr. Ralph Isham, Chicago, U.S. Hosp.

Dr. H. A. Johnson, one of the secretaries, invited the delegates to attend the National Canal Convention, now in session in this city, and thereby obtain free tickets home.

Here a recess of ten minutes was allowed for each State to nominate a delegate, and constitute the committee on nomination.

The following gentlemen were chosen on the nominating committee:—Drs. J. N. Stiles, Vermont; John Homans, Massachusetts; L. N. Beardsley, Connecticut; James McNaughton, New York; John Blain, New Jersey; H. F. Askew, Delaware; W. S. Battles, Ohio; Jas. F. Hibberd, Indiana; Wm. Mayberry, Penn.; H. O. Hitchcock, Mich.; D. W. Stormont, Kansas; John C. Hupp, Virginia; J. H. W. Baker, Iowa; H. Van Duzer, Wisconsin; H. Noble, Illinois; W. K. Boling, Tenn.; C. C. Cox, Maryland.

Dr. Josiah Simpson was chosen in behalf of the U.S.A.

On motion of Dr. N. S. Davis, of Ill., the Acting President, Dr. Jewell of Penn. read his Annual Address on retiring from office.

The following officers were elected for the ensuing year—*President*, Alden March; *Local Secretary*, Guido Furman. *Committee of Arrangements:* Drs. Henderson, Blakeman, Markoe, Finnell, Flint, Arnold, Griscom.

The next meeting will be held in New York.

Army Medical Intelligence.

REPORT OF THE NUMBER OF BEDS

OCCUPIED BY THE SICK, NUMBER OF VACANT BEDS, AND TOTAL NUMBER OF BEDS, IN THE U.S. GENERAL HOSPITALS, FOR THE WEEK ENDING MAY 9, 1863.

LOCALITIES.	OCCUPIED.	VACANT.	TOTAL.
Department of Washington,	7.964	6,126	14,090
Baltimore District, Middle Dep't,	3.941	6 623	10.564
Philadelphia " "	3,830	7,916	11,746
Department of the East,	3,853	5,947	9,800
" of Virginia,	1,172	678	1,850
District of Western Virginia,	776	563	1,339
" Ohio,	2,146	553	2,699
" Kentucky,	3,092	2.572	5,664
" Indiana,	1,161	1,227	2.388
" Illinois,	1.200	567	1,767
Department of the Missouri,	2,783	3.981	6,764
" " Cumberland,	5.662	4,542	10,204
" " Tennessee,	2.333	2,055	4,388
" " North West,	544	1.129	1,673
" North Carolina,	931	384	1,315
" " South,	387	203	590
" " Gulf,	3,176	976	4,152
	44,951	46,042	90,993

It is in contemplation to close several of the hospitals in Baltimore and other cities, particularly those for which the United States is paying high rent.

Names of Hospitals.—The General Hospital Ocean House, Portsmouth, Va., has been called the "Balfour" Hospital in memory of Surgeon Balfour, who died in 1830, after thirty-eight years' service in the army and navy.

The General Hospital "Steuart's Mansion," Baltimore, Md., has been called the "Jarvis" Hospital in memory of the late Surgeon N. S. Jarvis, U.S.A., who died while Medical Director of the Middle Department.

The General Hospital Chestnut Hill, Philadelphia, Pa., to be known as the "Mower" Hospital, in memory of the late Surgeon Thomas Mower, U.S.A, for many years Chief Medical Purveyor U.S.A.

The General Hospital, at West Philadelphia, Pa., to be known as the "Satterlee" Hospital, in honor of the eminent, faithful, and meritorious services of Surgeon R. S. Satterlee, U.S.A.

The General Hospital at Fort Schuyler, New York, to be known as the "McDougall" Hospital, in honor of the eminent services of Surgeon Charles McDougall, U.S.A.

The General Hospital at David's Island, New York, to be known as the De Camp Hospital in honor of the long and faithful services of Surgeon S. G. I. De Camp, U.S.A.

Surgeon-General W. A. Hammond, U.S.A., is on a visit to Philadelphia, Pa. Surgeon J. R. Smith, U.S.A., is in charge of the Bureau during his absence.

Dr. G. W. Hogeboom, of Kansas, has accepted the position of Assistant Surgeon of Volunteers, previously declined by him.

Original Lectures.

DISEASES OF THE RESPIRATORY ORGANS IN CHILDREN.

BEING A COURSE OF LECTURES PREPARED FOR DELIVERY DURING THE SPRING SESSION OF 1862 IN THE COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.

BY THE LATE
C. VAN ALEN ANDERSON, M D.,
PHYSICIAN TO CHILDREN'S DEPARTMENT, DEMILT DISPENSARY, N Y.

LECTURE II.—PART I.

CROUP.

At our last meeting, gentlemen, we studied the nature and consequences of unexpanded and of collapsed lung, and of the different forms of coryza. We found that the first produced death, not by disease, but by a non-fulfilment of a vital function; and that the second—an inflammation of the mucous membrane—proved fatal through an interference with the nutritive processes, or else by a directly lowering influence upon the general system. To-day, I propose to bring to your notice a complaint which affects the larynx and trachea—which shuts the door of the respiratory apparatus against the life-giving air, and kills by the cruel process of suffocation; in other words, Croup, or cynanche trachealis. It is, as you know, a peculiar form of laryngitis, occurring most frequently in children, and distinguished by the formation of a false membrane in the air passages.

Its history is interesting. But by the word history I do not mean the description of the disease itself alone; I mean also the first recognition of it by medical men, the various opinions that have been promulgated, and discoveries that have been made in relation to its nature, and the numerous steps that have been taken one after another until we have acquired our present really imperfect acquaintance with it. It seems to me that this kind of knowledge should be more cultivated by us; for we have arrived at that stage of our science when it becomes apparent to the dullest that medicine is yet in its infancy; that wonderfully illimitable, unexplored fields lie before us: and so, by sometimes looking back to the point from which we started, and comparing our utter ignorance then with the glimmer of light that we have now, we may gather fresh courage for more brilliant discoveries in the future.

Croup appears to have been known in a dim, confused way to the most ancient medical writers. Hippocrates makes a brief, indistinct mention of a disorder that has been thought by some to be this disease. A more faithful description is found in the works of Aretæus of Cappadocia, a physician who practised in Rome between the reigns of Vespasian aud Adrian. Many passages are exceedingly graphic, as for instance the following picture of the last stage: "The pallid or livid countenances of these patients assume a sad expression, while the tonsils are pressed together. When they lie down they rise up again that they may assume a sitting position, not enduring a recumbent position; but if they are sitting up, wanting rest, they are again forced to lie down; and many of them standing upright, walk about, for they are unable to remain quiet. Inspiration is great, expiration truly small. There is hoarseness, and want of voice. These signs rapidly grow worse, when suddenly they die in collapse." Artius, an Alexandrian, who flourished about four centuries ater, while using the words of Aretæus, added to them many comments and particulars which render it beyond doubt that in his day the disease was well known, aud was the same that had been mentioned by the Roman writer.

The next mention of croup appears at the end of the sixteenth century in the works of Baillou, of Paris, who was the first to dwell on its anatomical characters. In the winter of 1576 it prevailed extensively at Paris, carrying off both children and adults, among the latter Baillou's father-in-law. He was therefore interested to a great degree in discovering its true nature, and the treatise, supported by clinical testimony, which he published, has since been extensively quoted, as affording the first scientific observations of modern times.

Whether it was that attention was really first drawn to this disease by Baillou, or whether, like some maladies of more recent periods, it then began to extend its influence more widely, and to penetrate more deeply into the various strata of human life, this much is certain, that since his time frequent and severe epidemics of croup have been observed by medical authorities. I am myself inclined to think that the disease did in fact become more widely diffused in the sixteenth century. The ancients were quite as keen in their remarks upon disease as we moderns are, and, indeed, many of our most successful remedies were anticipated by them—take, for example, the proposal of Artius to cure aneurism by ligation of the affected artery, an operation which it required so great a genius as John Hunter to revive: or take the accurate observations upon pathological conditions which are found in the works of Hippocrates, the very father of medicine—and it seems to me that they could hardly have overlooked a disease so distressingly fatal, and so distinctly marked in its various symptoms and stages, as croup is among us, had it prevailed then as generally as it does now. Moreover, many of us—not only those who have been in practice many years, and who are therefore entitled to guide us by their wisdom and experience, but also younger members of the profession—have seen diseases, for a long time confined to one country or one district, suddenly taking up their line of march like a conquering army, and seizing upon all known parts of the civilized world. I need not go back to the history of syphilis first appearing at the siege of Naples, and thence extending to all regions of the earth; nor need I refer to Asiatic cholera, starting from the East, crossing continents and oceans in its progress, and leaving its first traces everywhere, so that every year we have a greater or less number of sporadic cases; for, when I mention diphtheria, you will recognise a distemper that within the last four years has assumed the character I mention: that has become a native of England and of America, in both of which countries it was before to a certain extent unknown. Why croup, therefore, should have remained quiescent before, and should have spread only since the time of Baillou, I do not understand; but that it has done so appears to me not by any means improbable.

Next it made its appearance in Spain, and prevailed there for many years. It received in that country the name of *garotillo*, because those who were attacked by it perished as if they had been strangled by a cord. Mercatus, the physician of Philip II. and Philip III., published his observations upon it under the title of *consultations.* He remarks upon it as the most serious disorder he had ever witnessed, and is astonished at the rapidity with which it destroys life, and at the disproportion between the real danger and the appearance of the disease. Another Spanish physician also, who wrote twenty years later, does not differ in his estimate of it.

In the month of June, 1618, croup was first seen in Italy, in Chiaia, a market-town of Naples. Many children were destroyed by it, very much to the alarm of the doctors who had never seen it before. It was considered to be a consequence of infection rather than of contagion, and was ascribed to the exhalations which escaped from the ground after the earthquake of 1616; but its strangulatory nature was still insisted on by all who were brought in contact with it. There was one remarkable point about it, namely, that it first seized on the lower animals who kept their muzzles nearest the earth, then on children in the succeeding years. At the same time, or shortly afterwards, there were epidemics of croup at Palermo and at Messina.

Since that period frequent descriptions of croup have been brought before the world. Ghisi in 1747 gave an exact account of the epidemic which showed itself at Cremona in the month of May of that year. He dwells particularly upon the fatal nature of the disease, and gives a faithful picture of the sufferings of those who perished by it; moreover, he makes mention of the case of a little girl, who expectorated a tubular false membrane some moments before dying, and of finding in the trachea of another child opened after death, a similar formation. Treatises were written upon it by Starz, in 1749; Middleton, in 1752; Bergino, in 1755; Berghen, in 1759; Wahlbom, in 1761, and Wileke, in 1764.

The name of *Croup* was first proposed for this affection in 1718 by a Scotchman, Dr. Blair, of Cupar Angus; and a valuable essay, drawn from original observations, describing the disease with accuracy, and proposing tracheotomy for its relief, was published at Edinburgh by another Scotchman, Dr. Home, in 1765. He was succeeded by several writers in quick succession, one of the ablest of them being Dr. Samuel Bard, of this city, a founder of the New York Hospital, and an illustrious member of the medical faculty of Columbia College (Prize Essay by Albers, of Bremen, in 1805).

Attention was more particularly called to the true nature of croup in consequence of two memoirs read before the French Academy of Medicine in 1821, by M. Bretonneau, of Tours. An epidemic of the disease known since the time of this distinguished man as diphtheria, attracted his earnest and anxious study of its phenomena. It is unnecessary to enter into a full account of his researches, though the reasoning by which he reached his conclusions displays great talent. After having conclusively shown the existence of a disorder characterized by the effusion of false or mucous surfaces, and before his time confounded with malignant sore throat, he attempted to prove its identity with croup. He did indeed triumphantly demonstrate that, when the pseudo-membrane of diphtheria extends to the larynx and trachea, it produces exactly the same symptoms as any false membrane in the same situation, and cited many cases which firmly sustain his position. But after the publication of his views in 1826 there were many and vigorous protests against croup and diphtheria being considered the same disease, not only by English writers, but also by continental authorities. Bucheteau was the first, I believe, to raise his voice against the sweeping assertions of the physician of Tours, which he did in the same year 1826; and he was followed by Dr. Abercrombie in a treatise on an epidemic which prevailed in Edinburgh, and in which a clear distinction was made between diphtheria and croup—and by others in whose works the same difference was insisted upon.

I will not weary you by an account of the various opinions, *pro* and *con.*, which have been urged for the last thirty years. I shall content myself with stating that the distinction between the two diseases is now, as far as my information goes, clearly recognised; at any rate, that among American physicians diphtheria is not croup, but only a secondary form of it; and, therefore, I shall draw your attention to the diphtheritic inflammation, merely as a modification of the disease.

Croup is one of the most alarming and fatal maladies that curse humanity, and numbers various distinguished victims. The brother of the present Emperor of France was destroyed by it, his sad and sudden death producing numerous valuable works upon the disease in consequence of the offer of a prize by Napoleon I. General Washington is claimed by Bretonneau as one among the numerous martyrs to the diphtheritic form. Any one who reads our weekly bills of mortality will discover its frequency, and the danger that attends its presence. Generally it attacks children between the ages of one and twelve years, but oftenest those under five years of age. It has been seen in an infant of eight days old, in one of three months, and in one of eight months. It appears from the fifth report of the Registrar-General of Great Britain that, while 1022 out of 98,391 deaths in London took place from croup, 1013, or 99.9 per cent., occurred before the age of fifteen, and 879, or 87.8 per cent., before the age of five years. Of twenty-six cases which Dr. West has recorded, twenty-five occurred in children under five years, and twelve in children under two. Andral gives the following table of ages in 332 cases: He found it during the first month in 1 case, during the third month in 1 case, during the fifth month in 1 case, from five to twelve months in 18 cases, from one to two years in 61 cases, from two to three years in 45 cases, from three to four years in 54 cases, from four to five years in 42 cases, from five to six years in 29 cases, from six to seven years in 29 cases, from seven to eight years in 3 cases, from eight to eleven years in 6 cases, from eleven to fifteen years in 7 cases, from fifteen to thirty years in 13 cases, from thirty to fifty years in 10 cases, from fifty to seventy years in 12 cases.

In Philadelphia, during the two years preceding 1845, 475 deaths are reported from croup in infants between two and five years, 238 in those between one and two years, 319 in those under one year, 112 in those between five and ten years, and 6 in children over ten years.*

Original Communications.

SECONDARY HÆMORRHAGE.

ITS CAUSES AND TREATMENT.

By JOHN WILSON, Surgeon, U.S.V.,
IN CHARGE CARVER GENERAL HOSPITAL, WASHINGTON, D. C.

The frequent occurrence of this form of hæmorrhage in field and general hospitals, the serious consequences it entails upon the wounded man, even where the resources of the surgeon have enabled him to arrest it, and above all, the many deaths that occur when, from peculiarity of situation, nature of wound, or the unavoidable delay in affording his aid, the surgeon fails in his efforts to save his patient, have suggested to our mind the propriety of offering a few remarks upon the immediate cause, as well as the prophylactic medication indicated, as we think, in these cases.

We have long been of the opinion that depravation of blood is the prolific source of this hæmorrhage; and from a tolerably large hospital experience, as well as a considerable amount of information derived from intelligent surgeons engaged in field and hospital practice, we think we may safely state that this form of bleeding generally occurs in patients whose vital status is below par, and whose wounds show no effort at reparation, but, on the contrary, remain patulous, frequently emitting a grey, shreddy, and sometimes sanious and fetid discharge. In all these cases we conceive the hæmorrhage to result from a lack of formative power in the system generally, or the part specially. Let a man receive a wound from any of the missiles of modern warfare, by which any of the trunks or branches of the arterial system is severed, and whether the wounded vessel be ligated at once or not, the risk of secondary hæmorrhage will be exactly in proportion to his power of plastic reformation. Without this power even the ligature will very often fail to protect the patient: destructive disintegration will frequently set in, and the feeble barrier which nature may have attempted to erect against the flood will yield before the *vis a tergo*, and the hæmorrhage recur. There are also many cases of wounded artery, particularly if the vessel be small, which do not immediately require the ligature, the contraction and retraction of the wounded orifice, or the formation of a clot within it, being generally sufficient to guard against immediate danger. In these cases we cannot but think that, if proper regard were paid to the hæmatosic power, nature's primary tampon would be rapidly succeeded by organized exudative matter, and the security against hæmorrhage rendered permanent. Other cases of bleeding occur where no primary breach of continuity existed, and where the bleeding proceeds from vessels involved in the destructive process of sloughing subsequently occurring in the wound.

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* Condie, Dis. of Chil.

For all these classes of secondary hæmorrhage, *proteine* in some form, we conceive to be the surest remedy. Albumen we believe to be the *prophylactic styptic par excellence* —not applied to the wound, but introduced freely into the living economy. Compared with this, all other agents we deem scarcely worthy a serious consideration. How rarely do we see those frightful hæmorrhages from a kindly granulating wound, however large it may be; and on the other hand, how frequently do we see them where no plastic exudative matter building up its structure of granules is to be seen. A single glance at a wound should be sufficient to convey to the mind of a properly educated surgical man whether, on the one hand, nature is liberally supplied with material for her work, or, on the other, whether she is suffering from a want of material in the *general economy*, or defective *local assimilation;* and yet how many there are in our profession who seem to forget the fact that, in all large breaches of continuity or loss of tissue, the material of reparation must come from without; and that in this effort much of the plastic matter is lost in the complex function of repair; and also, that, in addition to the quantity needed for the direct purpose of reconstruction, an excess is required to protect against the destructive metamorphosis of combustion, which in these cases is almost invariably above the par standard of health.

Without a just and proper appreciation of these facts, we fear that our administration of stimulants and cordials will be in vain. Nor will the success of our local disinfectant be any better. Disinfection to a wound should first begin in the *cuisine.* A healthy wound needs no disinfectant. If we were to pay less regard to the "materia medica," and more to the materia nutritionis, would we not more frequently save our patients? We would reiterate, therefore, our doctrine, that albumen is the best styptic for secondary hæmorrhage, and that he who neglects this fact must consent to see nature express her indignance in sloughing wounds and fearful hæmorrhages, draining his patient of his little stock of vitality, until the "pale horse" and his rider pass by, relieving him from his travail of suffering, and bearing him where the inhabitants say, "we never hunger or thirst."

PISTOL-SHOT WOUND OF BRAIN.

By ALFRED BOTTER, M.D.

OF OVID, SENECA CO., N. Y.

The following case of pistol-shot injury to the brain I think of sufficient interest for publication, and accordingly I send you a brief account of it for that purpose. On the 19th day of February, James O'Barry, aged 17 years, of this place, was accidentally shot with a pistol in the hands of a schoolmate. The ball, which was of conical shape, three-eighths of an inch in length, and three-sixteenths of an inch in diameter at its base, entered the nose near its extremity, and a little to the left of the median line. It passed obliquely upwards and backwards, and entered the base of the brain beneath the right optic nerve, and immediately before and a little to the right of the sella turcica. It traversed the right hemisphere to the extent of three inches, and to the depth (from below upwards) of three-fourths of an inch. These facts were mainly obtained, of course, by the post-mortem examination. Immediately on the receipt of the injury, the young man applied his handkerchief to his nose, and went out of the house, the blood flowing freely upon the ground. He shortly became faint and fell. In this condition he was conveyed to his house, nearly a mile distant, and the physician of the family was summoned. An hour or more elapsed before his arrival; but he found his patient pale, with a cold, clammy surface, and small, frequent, and feeble pulse; the hæmorrhage had ceased; his mind was clear, and he complained only of pain in his head, over and behind his right eye; the pupil of this eye was widely dilated, and the vision of it totally destroyed. The wound was probed to the depth of five inches—sufficiently to show that the removal of the ball by surgical means was impracticable. An unfavorable prognosis was given, and the patient and friends were informed that the treatment of the case could be palliative only, and that a fatal result, sooner or later, would unquestionably ensue. Several hours elapsed before reaction was fully established. This, however, did occur very well, and the patient was quite comfortable in every way until nine days after, when a slight hæmorrhage took place from the right nostril. The external wound made by the bullet had entirely healed. The loss of blood at this time was attended with very little general disturbance, and everything passed on well until the 29th of the following month (March), when a severe hæmorrhage took place. This was arrested by the perchloride of iron injected into the nostrils; but great prostration ensued, lasting for more than an hour. Two days later, the same thing occurred with similar results. On the 11th of April it occurred again, attended with convulsions, and paralysis of the left side, and slight delirium. From this he slowly rallied, recovering entirely his mental faculties, but in other respects he was much enfeebled; his appetite and rest were impaired; he had turns of nausea and vomiting, and his thirst was urgent, and his paralysis unrelieved. This state of things continued with occasional slight bleedings until the morning of April 29th, when, after a comfortable night, and after taking with a relish a light breakfast, a more profuse hæmorrhage than any of the preceding suddenly came on. Under this he expired almost instantly, the blood flowing freely for some time after he had ceased to breathe. This was the sixty-ninth day (or ten weeks, less one day) after he was wounded. That he could survive so long after so serious an injury to a vital organ, makes his case one of interest among the numerous records of brain injury. The presence of the ball in the cerebral mass had occasioned but little apparent inflammation, owing, perhaps, to the frequent occurrence of hæmorrhage; yet suppuration had taken place, and a drachm or two of pus was found in the track of the missile.

I have presented this case without comment, because it seems to me one of thoughtful and suggestive interest to the profession, and because it is one of those melancholy records we are so often called to make, which are the result oftentimes, as it was in this case, of the most reprehensible carelessness.

May 5, 1863.

Reports of Societies.

AMERICAN MEDICAL ASSOCIATION.

FOURTEENTH ANNUAL CONVENTION,

Held in the City of Chicago, June 2d, 3d, and 4th, 1863.

(Concluded from page 276.)

RETIRING ADDRESS OF DR. JEWELL.

Dr. Wilson Jewell, acting President of the Association, then delivered his retiring address. He remarked that, since we last assembled in convention two years ago, as the representative body of the medical profession in this country, the delightful union of our Congress has been unexpectedly interrupted. Events the most thrilling in the history of any nation have occurred. The government of the United States, the mildest and most beneficent the world ever knew, has been assailed by an armed force. Our once happy and prosperous people have been plunged into an unnatural, causeless, and unprecedented rebellion, and thousands of families have been involved in distress and ruin. The most endeared relations in life have been severed; the strongest ties of parental and fraternal affection alienated, while our Union, the palladium of our safety as one people, now trembles in the balance. It was not strange if the troublous element had found its way into our counsels, yet he had hope still that the present struggle would be gloriously ended by a restoration of the Union. Their cause was based on the eternal principles of civil and religious liberty, and could not fail.

The speaker then turned to the subject which was most intimately connected with the objects of the convention, and spoke of the noble part taken in the struggle by the devoted members of the profession, who, amid the thunders of battle and the din of arms, worked firm and self-possessed to mitigate the horrors of the strife, and risked being killed or taken prisoners of war rather than desert the path of duty. Theirs was no warrior's ambition; they were stimulated by no wish save that of alleviating human suffering. Many of their members were in the army, and some slept the sleep of death. First and highly valued among them was their respected President, Eli Ives, whose knowledge and experience had rendered him so valuable a medical practitioner, and whose private virtues endeared him to all. The usefulness of the Association was one of the great aims of their late President, and he predicted great things of its future.

The orator then took a retrospective view of the progress of the Association, and spoke of the signs, in its present condition and standing, which point to a bright and influential future. He quoted passages from many eminent medical men in which the influence of the Association was spoken of and hints for improvement given. He would, however, direct their attention to another subject, not that he loved Cæsar less, but Rome more. He would speak of Hygiene, a science which bears no modern date, but claims its origin in the antediluvian age, is now so little understood, and presents an illimitable field for research. The fearful responsibilities of their calling should stimulate them to a thorough course of study in all that pertains to the preservation of health, the extension of the term of existence, and the alleviation of disease, where prevention was rendered impossible. There was room to hope that the American Medical Association would throw out a light which in the medical world would equal the refulgence of that bright ray which shone out from the retreat of the Wittenburg student, and dissipated the darkness which until then brooded over the theological firmament. Yet this illumination could ensue only upon a careful study of the laws of Hygiene. Not that the subject was incompatible with the design of the Association; it had done great service in that department, and time would fail to tell the aid rendered by it in the past. But the vestibule of the Hygienic temple alone had as yet been attained. The method of curing disease had heretofore attracted not too much of attention, but it had perhaps thrown into the background those sanitary considerations which will teach how to prevent disease by conformity to the laws of health. This was a reform much needed, but there seemed to be a perpetual obstruction presented to its progress, and a private prejudice in the popular mind against it. He would propose a two-fold method whereby the evil might be remedied. It was to elevate Hygiene as a branch of scientific study, and give it a distinct chair in the medical colleges. He would constitute it as a curriculum of study which was essential to the reception of a diploma. He counselled also the adoption of some more popular and successful plan than had otherwise been pursued, for enlightening the public mind on the relations of preventive measures to the health of the people. The etiology of disease was the basis of the science of preventive medicine. This was being better understood than formerly, and one of the good fruits springing out of the present unhappy struggle would be the elimination of a multitude of facts bearing on the relations of military discipline to military health, and the consequent efficiency of the soldier. These facts were of incalculable value, and would exercise a largely beneficial influence upon the health of future ages. Already a work of this kind has been authorized by the general government, which will contain an elaborate classification of military diseases, and the influence of hygienic regulations thereupon. The time was probably not far distant when each State would have its bureau of health, and recognise the indissoluble relation existing between sanitary conditions and moral developments, as well as on the physical organism. Already two cities of the Union had taken vigorous action in this matter, and the Garden City might well claim the credit of having set the example of aiming to insure civic healthfulness. He recommended that the word "Hygiene" should be written in letters of gold on the escutcheon of the Association.

On motion of Dr. Sprague of New Yorn, the thanks of the Association were tendered to the retiring President for his eloquent, patriotic, and scientific address.

Dr. Davis, Chairman of the committee of arrangements, presented the following list of candidates for permanent members for election:—Walter Hay, Ill.; S. W. Bicknell, Wis.; E. W. Jenks, Mich.; S. Earle, Ill.; W. W. Sedgewick, Ill.; V. S. Hurlbut, Ill.; Thos. Bevan, Ill.; John McAllister, Ill.; P. H. Haydock, Ill.; N. P. Peterson, Ill.; H. N. Hurlbut, Ill.; E. C. Gardner, Vt.; John Bartlett, Ill.; Henry Durban, Ill.; R. C. Hamill, Ill.; Webster Jones, Ill.; all of whom were elected.

The following were invited to participate in the deliberations of the Convention:—A. L. Marion, Ill.; L. D. Glazebrok, Indiana.

The President appointed Drs. Pierson of Ill., Beardsley of Conn., and Cutter of Mass., to draft resolutions expressive of the sense of the association respecting the death of the late President, Dr. Ives.

The association then adjourned to three o'clock.

AFTERNOON SESSION.

Tuesday, 3 p.m.

The meeting was called to order at 3 p.m., and the committee of arrangements read the following names of delegates who had arrived since the morning:—

Dr. Wm. M. Huntington, Vt.; Drs. Jas. Dunlapp and Lyman Bartlett, Mass.; Drs. Ralph Deming and Horace Burr, Conn.; Dr. B. L. Delano, N. Y.; Dr. Danl. Holmes, Penn.; Drs. W. C. Hill and C. McDermott, Ohio; Drs. Hiram Mann, A. L. Mimam, Van C. Secor, H. W. Jones, D. P. Brengle, Thos. Beven, H. N. Hurlbut, Silas Earle, T. D. Fitch, John McAllister, S. R. Heven, S. T. Hume, J. S. King, E. C. Gardner, C. C. Lattimer, Simon Clarke, Wm. H. Byford, H. B. Brown, D. E. Foote, Jos. Perry, H. C. Robbins, J. A. Brown, D. F. Crouse, C. D. Rankin, Wm. Robinson, N. P. Peterson, M. Parker, Illinois; Dr. E. W. Jacke, Mich.; Drs. S. W. Bucknell, John G. Meecham, Wis.; and Dr. T. J. Mendenhall, Missouri; Dr. Tiffin Larke, Kansas; R. H. Gilbert, U.S.A., Ft. Monroe, Va. (Medl. Dept. U.S.), and Dr. Wm. Jayne, Dacotah Territory.

The acting President appointed the following members to constitute the committee on voluntary communications: Drs. Marsh of N. Y., Mayberry of Penn., Byford of Ill., Mendenhall of Miss., and Langford of Ohio.

The report of the Treasurer was read by Dr. Askew, of Delaware, the Treasurer being unable to attend. He reported that owing to the unsettled state of the country and the advanced price of printing, it would be necessary to print only such papers as were of great value, and to condense those as much as possible, or the treasury could not bear the cost. The proceeds of volumes sold were $1,982 25; balance on hand last year, $597 61; balance on hand this year, $504 21. Report adopted.

The Committee of Publication reported the result of their labors during the year and the number of volumes now in their possession. Report accepted.

Diarrhœa Adiposa.

Dr. Griscom, by leave, presented a report of a case of

Diarrhœa Adiposa, which had recently been presented in he New York Hospital, under his care. A Crimean solier was attacked with severe dysentery during the war, which continued a year, and was followed by the above named disorder, consisting of discharges of *oil* from the bowels, which has continued ever since (about six years) with occasional intervals, to the average extent of two and half ounces daily. This exceedingly rare case (for the ubstance resembles pure olive oil, and hardens when cool o the consistence of butter) excited much interest in professional circles, and induced the Doctor to examine all the medical records within his reach for other cases that may have occurred; and the result was a table, included in the paper read, of twenty-six cases, including his own, which were all that appear to have been reported during the last wo centuries in England, France, and this country. Two other cases, only, are known to have been seen in the Unied States: one reported by Dr. Goold of Boston, and one by Dr. Wells of Connecticut, in the *N. Y. Med. Times*, of *Feb.*, 1854. One point of remarkable interest, in connexon with Dr. Griscom's case was, the discovery that this peculiar discharge, which the patient declares to be a cause of much weakness of body (although otherwise in pretty good health), is almost entirely arrested by the exhibition daily of from six to eight ounces of alcoholic stimulus, whiskey seeming to act as a consumer of the oil, from whatever source it is derived.

The table of twenty-six cases, collected by Dr. Griscom, gives a resumé of the circumstances attending each; such as the amount and character of the discharge in each, the age and sex of the patients, the attendant symptoms, the result and the autopsic appearances when dissections were made.

Of the twenty-six cases, fourteen died, and of four the issue was not mentioned by the reporters. Eight recovered entirely, or were so far improved as to experience no inconvenience from the symptom. Among the fourteen fatal cases, eight were found to have diseased pancreas, and four were not examined after death.

The conclusion of Dr. Griscom's paper was a brief review of the cases in connexion with criticism of various theories which have been proposed by the reporters of the cases, and other authors. The writer chiefly referred to is Claude Bernard, the author of the able "*Mémoire sur le Pancréas*," who therein maintains that the oil is all derived from the food, and appears with the fæcal discharges, in consequence of disease of the pancreas suspending the pancreatic secretion; it being the province of that fluid, according to his views, to emulsionize the oily ingredients of the ingesta, and prepare them for the further stages of digestion.

Several cases of this phenomenon having occurred in connexion with diseased pancreas, Bernard used them as proofs of his views; but, as stated by Dr. Griscom, omitting the mention of those cases which gave no other evidence of diseased pancreas. Bernard further asserts that it is only in *chronic* and not acute disorders of the pancreas that the discharges of oil occur; whereas, according to the cases collected by Dr. Griscom, it appears that in several instances the symptom lasted too short a time to admit the idea of a chronic disease of that organ; and moreover, the complete recovery of some cases is an additional objection to the idea of Bernard.

Without attempting a solution of the knotty question, except to hint that the liver may possibly, on further investigation, be found to have some influence in the production of the unique excretion, the Doctor expressed the belief that with the lights of modern science impelling further researches into the arcana of the digestive functions, these will not much longer remain as such.

In illustration of the oleaginous character of the discharge from his patient, he lighted a candle, and exhibited a cake of soap prepared with it, which was referred to the section on practical medicine.

REPORT OF NOMINATING COMMITTEE.

The Committee on nominations presented the following partial report:—For *President*, Dr. Alden March of N. Y. For 1*st Vice President*, Dr. Jno. Cooper of Del.; 2*d Vice President*, Dr. David Prince of Ill.; 3*d Vice President*, Dr. C. C. Cox of Md; 4*th Vice President*, Dr. E. S. Carr, of Wis.; which report was accepted and adopted.

The Chair appointed the following to escort the President to the chair: Drs. Brinsmade of N. Y. and Wallace of Penn. To escort the 1st Vice President, Drs. Griscom of N. Y. and Pearson of N. J.; the 2d Vice-President, Drs. Cutter of Wis. aud Edmiston of Wis.; the 3d Vice-President, Drs. Thomas and Wickersham of Ill.; the 4th Vice-President, Drs. Hollister of Ill. and Richardson of Mich.

The newly-elected President briefly returned thanks for the honor conferred. Next in order were the reports of Special Committees.

REPORT OF COMMITTEE ON PRIZE ESSAYS.

The report of the Committee on Prize Essays was read by Dr. D. L. McGugin of Iowa. He reported that only one essay had been published, which was worthy of the prize medal. It is an inquiry into the properties and physiological uses of Veratrum Viride, with notices of its alkaloid, Veratria, as derived by certain processes. He considered the essay as worthy of publication and of the prize.

Dr. Lawson moved that the prize be awarded to the author, and the paper forwarded to the Committee of Publication.

Dr. Cox moved that the essay be referred to a special committee, of which Dr. McGugin shall be chairman, to read the essay and report at some future time.

The motion of Dr. Lawson prevailed, and the name of the author was then announced—Samuel R. Percy, M.D., Professor of Materia Medica and Therapeutics in the New York Medical College. The prize is one hundred dollars.

A communication was received by Dr. Davis from Dr. E. R. Squibb, of New York, chairman of the committee on "the practical workings of the United States law relating to the inspection of drugs and medicines," stating that he could not attend, and offering to report next year. Agreed to.

Dr. A. K. Gardner, of New York, presented a paper on the use and abuse of pessaries, but the reading was postponed till the next morning.

Dr. McGugin, on Puerperal Tetanus, etc., reported progress and asked to be continued for another year, which was granted.

Dr. C. C. Cox, on Hygienic Relations of Air, reported progress and asked to be continued. Granted.

Dr. J. W. Russell of Ohio asked leave to continue his researches on the Effects of Stimulation in the Treatment of Fractures. Granted.

Report on Necrology is continued, Dr. C. C. Cox as chairman.

THE HUNTER MEMORIAL.

The committee on the Hunter memorial reported that the sum of $357 had been raised, in one dollar subscriptions, towards the Hunter fund, a portion of which has been forwarded to London. The smallness of the contribution was imputed mainly to the fact that the monument would stand on British soil, and the indifference felt by England about the present national trial had checked enthusiasm. The report was contained in a letter from Dr. Bowditch, which was received and placed on file. It was also decided that the account be closed, and the balance forwarded to England.

Dr. Davis reported, from the committee of arangements, the following gentlemen as permanent members:—Drs. Daniel B. Brengle, Manchester; Van Courtland Secord, Galena; J. B. Samuel, Carrolton; David Dodge, Chicago; James S. King, Lemont; D. F. Crouse, Mount Carroll; all of Illinois. The nominations were confirmed.

THE CALOMEL ORDER OF THE SURGEON-GENERAL, U.S.A.

Dr. Lawson of Ohio called attention to the recent order of the Surgeon-General prohibiting the use of mercurials and tartarized antimony by the army surgical corps. He moved that the Association express its disapprobation of the order. The subject was referred to a committee, with instructions to inquire into the facts and report. The committee consists of one member of each State. The Chair appointed Drs. Lawson, Dalton, Stiles, Catlin, Brinsmade, Pearson, Ashew, Wallace, Hupp, Woodworth, Wing, Palmer, Van Duzer, McGugin, Mendenhall, Logan, and Polinz.

THE RELATIVE RANK OF ARMY SURGEONS.

Dr. Cox called attention to the want of a recognition of army surgeons, and urged that relative rank should be accorded to them. At present it was not possible for a surgeon to rise above the rank of Major. He therefore offered the following resolutions :—

Resolved, That a committee of five be appointed by the Chair to draft a memorial to Congress asking the enactment of a law by which Surgeons in the service of the United States Army may be accorded relative rank in the same.

Resolved, That each medical gentleman present be urgently invited to use every proper influence with the members of Congress from his respective district, to urge the passage of a law favorable to this object at the ensuing session of Congress.

The resolutions were seconded by Dr. McGugin in an able speech, in which he reviewed the relative responsibilities of the Surgeon and Commander, and spoke of the injustice perpetrated in the case of the former. The resolutions were discussed by several other delegates, and were finally adopted.

Remarks were then made by Dr. Arnold of New York on the necessity of making medical provision for railroad accidents. He distributed printed copies of papers read by him before the New York State Medical Society and the Academy of Medicine.

SECOND DAY.

Wednesday, 9 a.m.

The Association was called to order at 9 a.m., by the President, Dr. Alden March, of Albany, N. Y.

The minutes of the preceding day were read by the Secretary, and approved. The Chairman of the Committee of Arrangements read the names of members and delegates who registered their names since the last meeting. A large number of additional names were announced as having arrived, including a large number of physicians and surgeons of this city. He also proposed the following gentlemen as members, by invitation :— Drs. J. H. Foster, W. G. Millar, and J. A. Brown, all of Illinois; and the following gentlemen as permanent members :—Drs. Tiffin Finke, Kansas; W. C. Hall, Ohio; Hiram Wanger, Ill.; H. K. Dean, Ind.; H. C. Robbins, Ill.; E. J. Duffield, Ill.; W. Jaynes, Dacotah Terr.; C. M. Clerk, Ill.

On motion of Dr. Jewell, of Penn., Dr. J. Macgowan, an eminent medical missionary from China, was invited to take a seat with the Association. Dr. Macgowan being desirous of addressing the Association on the state of medicine in China, it was resolved, on motion of Dr. Griscom, of New York, to invite Dr. Macgowan to do so, during the first half-hour of the afternoon session.

The reports of Committees being in order, on motion, that of the Committee on Medical Education was postponed until the afternoon session.

The Committee of Nomination made a further report, in which Baltimore was recommended as the place of next meeting of this Association. Accepted. Dr. H. S. Downs of N. Y., moved to amend, by substituting the word New York for Baltimore. Considerable discussion arose, various members proposing different places. The member from Maryland, Dr. Cox, advocated the feasibility of appointing the next meeting at Baltimore, as a national measure. It was for the interest of the Association and the country to hold the meeting *as far South as possible.* The effect of holding it at Baltimore would be a healthy one upon that city and its medical interests. Men of wealth and influence would open their doors and extend warm hospitality to the members of the Association.

Dr. Furman, of New York, stated that the delegation from the New York County Medical Society, the New York Pathological Society, the New York Academy of Medicine; from the City Hospital, Bellevue Hospital, the University Medical College, College of Physicians and Surgeons, and the Bellevue Hospital Medical College, and various delegations from other societies and institutions from New York city, had been directly instructed to tender their invitation, and hoped that the Association would act courteously and deliberately, and with wisdom.

Dr. Davis, of Illinois, followed Dr. Furman, with an urgent request to accept this invitation extended by our New York brothers, and made a very animated, patriotic, and common-sense address.

THE ASSOCIATION TO MEET IN NEW YORK.

The question finally resolving itself into a choice between Baltimore and New York city, a vote was taken. The vote being doubtful, a count was called for, with the following result: New York, 68—Baltimore, 43. Dr. Downe's amendment was adopted. On motion of Dr. Cox, of Maryland, the vote was made unanimous.

On motion of Dr. Griscom, of New York, the remainder of the report, concerning the officers of the next meeting, committee, etc., was referred back to the Committee, for reconstruction, rendered necessary by the substitution of New York for Baltimore.

Dr. Davis, of Illinois, read a communication from Dr. Bowditch, of Mass., respecting the necessity for the organization of an ambulance system for the army, accompanied by a pamphlet upon the subject, which was distributed among the members.

Dr. Homan, of Mass., moved that a committee of one from each State represented, be formed to memorialize the President of the U.S. upon the subject referred to by Dr. Bowditch, which was passed, and the Chair appointed the following gentlemen to constitute such committee: Drs. Emmans, Dalton, Griscom, Hubbard, Pearson, Jr., Cooper, Trotter, Happ, Almy, Hibbard, Palmer, Clarke, Carr, Sprague, Mendenhall, Logan, Bolinz, and Surgeon Simpson. Dr. Griscom being the Chairman thereof.

On motion of Dr. Underhill of N.Y., a resolution of thanks was passed unanimously to Dr. Wilson Jewell, late acting president, for the able and dignified manner in which he has presided over the deliberations of the association.

Dr. Hibbard, of Ind., offered a resolution, requiring the appointment of a committee to urge the compulsory examination of every person in the U.S. It was passed, and referred to the Section of Hygiene.

DEATH OF DR. ELI IVES, LATE PRESIDENT.

The committee on resolutions concerning the death of the late Dr. Eli Ives, late president of this association, reported the following resolution :

"Whereas it has pleased the Divine Ruler of all events, to take from our midst one of the most distinguished and venerable members of our profession, Eli Ives. of New Haven, Conn., the late President of this Association; a man full of years and honor: and whereas it becomes us at all times to bow with submission to the righteous will of the Almighty, believing that He doeth all things well, therefore,

Resolved, That in the death of Eli Ives, this Association has lost a firm friend and ardent advocate for the elevation and dignity of the science of medicine—the profession one of its most highly gifted members, and society at large one of its highest ornaments.

Resolved, That while we mourn the dispensation that has deprived us of the presence and counsel of our late venerated President, we condole with his bereaved family, in the severe loss they have sustained.

Resolved, That a copy of the foregoing preamble and resolutions be forwarded to the family of the late Eli Ives, signed by the president and secretary, as an expression of the sympathies of this Association. All of which was adopted.

SECTIONS ABOLISHED.

On motion of Dr. Byford of Ill., the session of sections was suspended for this session, in order that the voluntary communications might be read; it was also moved that all papers that have been referred to sections be read in general session, and the meetings in sections be dispensed with.

Dr. Mayberry, of Penn., chairman of the committee on voluntary communications, presented a paper by Dr. Anderson, of Ill., on "Diathesis, in its surgical relation," which was read by the author. The paper of Dr. Anderson called up Dr. Hibbard, of Ind., who combated in rather a lengthy speech some of the principal features presented. Dr. A. replied in support of his arguments, developing from his experience the truth of the position which he assumed. Other members participated in the discussion, after which the paper was approved of and referred to the committee of publications.

The meetings of the sections having been abolished, the association appointed Drs. Hibbard, of Ind., Jewell, of Penn., and Griscom, of New York, to constitute the committee on compulsory examinations, which had previously been referred to the section on Hygiene.

On motion of Dr. Davis, of Ill., the association adjourned to 3 p.m. for the transaction of general business.

AFTERNOON SESSION—SECOND DAY.

ACCLIMATIZATION OF CINCHONA PLANT.

The minutes of the morning session having been read and approved, Dr. J. Macgowan, Medical Missionary in China, according to a resolution passed this morning, was invited to address the association on the state of medical science in that empire. He explained to the meeting the professional bearings of his proposed scientific and industrial expedition to the unknown parts of Eastern Asia. Investigation in relation to the history of epidemics, into the materia medica, and into the ethnology of those lands, cannot fail to elicit many facts which promise to be of incalculable value to medicine and the collateral sciences. Dr. M. further expressed a hope that the association would take some measures to induce the Haytian Government to undertake the acclimatization of Cinchona trees (quinine plants). He gave an account of the success of the Dutch in Java, and of the English in India, and fully believes that in St. Domingo these invaluable plants might be readily cultivated, and thus secure additional supplies of this great remedy in fevers.

Dr. Macgowan has been in correspondence with the Haytian Ambassador in Washington on the subject, and solicits the influence of the profession, in urging the institution of the necessary experiments in those portions of America north of the equator where the soil and climate seem to afford sufficient encouragement.

In the course of his remarks, the speaker gave an account of the standing of the medical profession in China and Japan, of their medical literature, etc., and also stated the remarkable facts that they have made many discoveries in the use of remedies for certain diseases, in some cases either actually the same or very similar to those discovered and used here.

On motion of Dr. Cox, of Maryland, Dr. T. O. Edwards, of Chicago, was invited to a seat on the platform.

On motion of Dr. Hubbard, of Conn., Dr. Jonathan W. Brooks, of Chicago, was elected a permanent member.

The Chairman of the Committee of Arrangements read a list of newly arrived delegates since the last report. He also proposed the following gentlemen as permanent members:—Drs. I. B. Bushtell, Ind., C. Truesdale, Ill., W. R. Fox, Ill., L. F. Warner, Ill., M. Parker, Ill., which were elected.

Drs. L. T. Havens, of Wisconsin, and C. J. Taggart, of Wisconsin, were invited to seats.

REPORT OF COMMITTEE ON EDUCATION.

Dr. Cox, of Maryland, presented from the Committee on Medical Education the report which had been postponed from the morning session. He reviewed the past history of the profession in this respect, and the absence of proper attention to the subject. Many valuable suggestions as to needed improvements were also made. After the rendering of this report the Committee submitted the following resolutions, which, after discussion, were adopted:—

Resolved, That a thorough preliminary education in English, Latin, mathematics and physics, constitutes an essential pre-requisite to the admission of a student of medicine into the office of a medical preceptor, or as a matriculant of a respectable medical college.

Resolved, That the advancement of medical education demands a more extended and symmetrical course of instruction in the colleges, and a more thorough and impartial examination for the degree of doctor of medicine than at present prevail.

Resolved, That Medical Jurisprudence and Hygiene are highly important branches of Medical Science, deserving the careful consideration of all medical teachers and schools.

Resolved, That societies for medical improvement—State, district, and county—are important auxiliaries to the advancement and promotion of science, and are therefore highly recommended by this body, as valuable levers in the cause of medical education.

The Committee appointed to make a report upon the recent order of the Surgeon-General, prohibiting the use of mercurials and tartarized antimony by the army surgical corps, made a majority report through Dr. Lawson, of Cincinnati, and an entirely antagonistic minority report by Dr. Woodworth, of Indiana. The former strongly favored the use of these remedial agents in the army, and the latter as strongly discountenanced their use there. Each report was backed up by resolutions rigidly endorsing the language of the report. After an animated discussion, on motion adjourned.

THIRD DAY.

Thursday, 9 a. m.

The Association was called to order by the President. After a partial reading of minutes, the further reading was dispensed with.

On motion, Dr. Greene, of Mass., was invited to a seat on the platform.

The following gentlemen were admitted permanent members by invitation:

Isaac Snyder, Jackson, Mich.; R. B. Treat, Janesville, Wis.

The following were admitted members by invitation:

Granville S. Thomas, Joliet, Ill.; J. S. Pashley, Osceola, Ill.

Dr. Cox, of the Army, announced the sudden departure of Dr. Wilson Jewell, of Pennsylvania, caused by receiving intelligence of the unexpected death of a son, and offered a resolution of condolence, which was adopted.

Regular business being in order, the reports of Committees were taken up.

Dr. Gilbert, of the Army, in behalf of the Committee on the Extinction of the Aboriginal Races, reported progress, and, on motion, the Committee was continued another year.

The President having announced that the order of the Surgeon-General, U.S.A., debarring calomel and tartar emetic from the use of army surgeons, and which was previously referred to a committee, was in order, by consent of the Association the committee on the subject offered a substitute for the resolutions introduced yesterday.

There is a strong feeling manifest in the Association against this famous Order No. 6, of Surgeon-General Hammond, and it has more than once been referred to with expressions savoring more of opposition than approval.

Pending the discussion, previous to the vote, Dr. Cox, of the Army, said substantially as follows:

While the Association had the right to protest against the order of the Surgeon-General, he wished it to remember that the order referred exclusively to the corps of Army-Surgeons under his control, and had no reference to the use of those drugs in private practice. The order originated in the abuse of calomel by a number of incompetent surgeons in the army, appointed by the Governors of the several States, who consider the *liver* the packhorse of the human system. The Medical Bureau of the United States comprises men of science, who understand how far the evil has been perpetuated and the necessity of correcting its abuses. The fact that other mercurials have not been interfered with, shows how great the necessity that exists for an order so apparently sweeping, and which the Association deems so arbitrary.

He did not desire to protract the debate, but felt it due his position to say something before the final vote should be taken. He was not up either to defend or condemn the order. In a long practice he had seen the abuse of calomel in improper hands, as well as its benefits from its legitimate and judicious use. He wished a discrimination to be made between the propriety of the order and the motives of the Surgeon-General. That gentleman's high character and motives are not to be questioned in this or any other public body. He deserved the thanks of the profession for the wholesome interest he had taken in the subject.

Dr. Cox's position called up several members, in reply. Calomel had fallen under the ban of an "unwise, unnecessary, and unprofessional" order, and that order received animadversion, ridicule, and unstinted opposition. The discussion became general, and while some desired to place no obstacles in the progress and encouragement of our armies in the field, their opinion of the order was of a character that culminated in the following resolutions, which were adopted:

> "*Resolved*, That from evidence within our possession, we can but entertain the conviction that the Surgeon-General of the U.S. Army has been led into expressions, in Order No. 6, which will convey errors respecting the abuse of calomel in the army, and we feel called upon to protect, so far as in our power, the reputation of the intelligent and self-sacrificing medical officers from the implied imputation of such general mal practice.
>
> "*Resolved*, That while regarding spanæmic medicines, particularly calomel and tartar emetic, when freely administered to soldiers in the field, the camp, or the hospital, where unfavorable hygienic conditions so commonly cause depression and asthenic conditions of the system, as being very often productive of injuries; yet that these articles, when judiciously employed, are useful, is a proposition according with the general opinion of the profession; and as abuse of an article is no just argument against its proper use, it is, in the judgment of this body, to be regretted that the object of correcting these abuses was not sought to be effected by an order of caution on the subject, and by dismissing from the service those disregarding such caution, and not by the extraordinary and, as we think, unjustifiable course of attempting to prevent, entirely, the use of articles, though liable to abuse, as are all powerful agents, yet which are well established in professional confidence as capable of useful application.
>
> (Signed) L. M. Lawson, Chairman."

The entire report, giving a history and details of the subject, in the same spirit, was also adopted.

On motion, it was resolved that a copy of the above resolutions be forwarded to the President of the United States, the Surgeon-General U.S.A., and the Secretary of War.

The Nominating Committee reported the following officers of the Association for the present year:

Secretaries—Drs. H. A. Johnson, Ill.; Guido Furman, N. Y.

Committee of Arrangements—Drs. James Anderson, N. Blakeman, T. M. Markoe, T. C. Finnell, Austin Flint, Jr., E. S. F. Arnold, J. H. Griscom.

Committee on Prize Essays—Drs. D. F. Condie, Pa.; E. Wallace, do.; Wilson Jewell, do.; E. R. Peaslee, N. Y.; Alfred Stille, Pa.

Committee on Medical Education—Drs. J. C. Dalton, N. Y.; M. L. Linton, Mo.; John Frissell, Va.; Howard Townsend, N. Y.; W. H. Byford, Ill.

Committee on Medical Literature—Drs. L. M. Lawson, Ohio; J. L. McGugin, Iowa; William Mayberry, H. Noble, Ill.; John Homans, Mass.

Committee on Publication—Drs. F. G. Smith, Chairman, Pa.; Caspar Wister, do.; Ed. Hartshorne, do.; H. F. Askew, Del.; S. G. Hubbard, Conn.; H. A. Johnson, Ill.; Guido Furman, N. Y.

Committee on Insanity—Drs. Ralph Hills, Ohio; C. H. Nichols, D. C.; D. P. Bissell, N. Y.; S. W. Butler, Pa.; John S. Butler, Conn.

Dr. Lee, from the Committee on Medical Literature, reported progress, by letter, requesting permission to present his report directly to the Committee of Publication.

A report was received from the Committee on Voluntary Communications.

Dr. Dalton was excused from further serving as chairman of the Committee on the Ambulance Corps, and **Dr. J. M. Warren** was substituted.

Dr. N. G. Davis commenced reading a paper on "The American Method of Treating Joint Diseases and Deformities," which was referred to the Committee of Publication, and its further reading suspended.

Dr. Homberger, delegate from New York, in behalf of **Dr. Elsberg**, of New York, showed some instruments for the treatment of diseases of the larynx, a "laryngoscopical mouth-piece," a laryngeal brush, a "sponge carrier," a porte-caustic, an insufflation-tube, a fumigating-tube, and an electropole. These latter six instruments have all a curvature of 112°, which Dr. E. found most efficient in carrying out the objects of laryngoscopical local medication.

RETROVERSION OF THE IRIS, ETC.

Dr. Homberger presented a case of "retroversion of the iris, dislocation of the lens into the anterior chamber, with complete detachment of the retina." He stated that such cases are exceedingly rare, and that three only are known to him reported by Von Ammon in the Archives of Ophthalmology. There was no apparent cause for this anomaly, which came on on the right eye without inflammation, and caused what was considered sympathetic irritation of the left eye. The eye was enucleated, and some months afterwards the patient came with a trembling iris on the other eye and considerably impaired vision. The ophthalmoscopic examination did not give a satisfactory result. A luxation of the lens had to be supposed on the ground of the trembling of the iris, though the ophthalmoscope did not reveal the margin of the bud as a black line, within the pupillary space. The application of atropine would evidently have been unjustifiable under such circumstances, and the patient was directed to present herself before Dr. H. when the symptoms would aggravate.

Dr. H. asked the members of the Association whether a similar case had occurred in their practice, and concluded with some further remarks on the case on the inquiries of **Dr. Alden March**. Both communications were referred to the Committee of Publication.

The paper of **Dr. Griscom**, on a case of diarrhœa adiposa (read on Thursday afternoon), was, on motion of **Dr. Furman**, referred to the Committee of Publication.

SULPHITES OF LIME AND SODA AS DISINFECTANTS.

Dr. A. Fisher, of Illinois, presented a paper on the use of sulphites of lime and soda in the treatment of hospital gangrene, phlebitis, erysipelas, and other zymotic diseases, and related a number of cases. The first was that of a lady: nearly the whole left leg was destroyed by sphacelus. It was necessary to amputate just above the knee, but little hæmorrhage occurring, only three or four small arteries being necessary to tie; not a drop of blood was found in the femoral artery, and it was so contracted and filled with fibrin and pus that it was not ligated. The vein was also completely filled with a reddish substance, the product of inflammation. Under the use of ʒj. doses of the sulph. soda in solution every six hours, the patient gradually improved; entire convalescence was established. The second case was of malignant (or blood poison) rheumatism. She took the sulph. of lime ʒj. every four hours for fourteen days, and no other remedy, with the exception of a pill consisting of lead and opium, for diarrhœa for a few days, was used. She commenced to improve in twenty-four hours, and continued so to do.

The husband of the second case was injured on the patella while the wife was ailing. The second day erysipelas commenced in the wound, extending up to the thigh, forming an abscess, which was opened, and the patient appeared to be relieved; but severe constitutional symptoms occurred in a few days, for which he took the sulphite of lime in ʒj. doses every four hours, and nothing else. In four or five days the recovery was perfect.

Dr. F.'s attention was first directed to the use of the sulphites in these cases by reading a review of an article "On Diseases depending upon Morbific Fermentation and their Treatment," by **Dr. G. Polli** of Milan. Published in *Braithwaite's Retrospect* and taken from the *Dublin Quar-*

terly Journal, May, 1862. He gives a statement of Dr. Polli's views on the action of the sulphites by experiments on dogs, and states that he first came to use them by reading that article, and then gives three more cases. 1st. A child, three years old, with scarlatina and erysipelas, cured by a teaspoonful of the saturated solution of sulphite of soda every two hours for one week, the constitutional symptoms improving in twenty-four hours after taking it. 2d. A very bad case of phlebitis and erysipelas following typhoid fever and periostitis of the tibia. Cured by the sulphite of lime, though tinct. ferri muriat. was used, but with no good effect. 3d. A case of malignant metritis after an abortion at the second or third month. Cured by sulphite of lime alone: ʒj every three hours for five or six days. He says that the sulphites of lime and soda are well retained on the stomach, and produce no sensible effect for the first twenty-four hours, when the patient begins to improve in all respects. He thinks the sulphites of magnesia and potass may be as beneficial as the sulphite of soda and magnesia from Dr. Polli's experiments. Has always used the pure sulphites, prepared by Dr. Squibb.

On motion, the paper was referred to a committee of three, of which the author is chairman, to continue his investigations and report again next year.

Dr. Cox, of the Army, offered two resolutions—one of thanks to the citizens of Chicago for their kindness and hospitality shown to the members of the Association during its session here, and another of thanks to the retiring secretary, Dr. Hubbard, for his able and faithful services.

The amendments to the Constitution of the Association proposed at the last meeting, were called up, discussed, and rejected.

A complimentary resolution, by Dr. Happ of Va., thanking the President and Secretary for their services, was adopted.

The following gentlemen, on motion of the Committee of Arrangements, were elected permanent members of the Association: L. H. Cary, Toledo, Iowa; Horatio Hitchcock, Chicago; L. F. Warner, Chicago; L. P. Cheney, Chicago; C. W. Shumway, Chicago.

Dr. N. S. Davis, of Ill., spoke of the use of sulphite of lime in erysipelas, and stated that in the last half of March and the first part of April, 1863, erysipelas was more prevalent in the city than usual; and, as a consequence, several very severe cases, occurring among the poorer classes, were received into the Mercy Hospital.

They constituted the subject of several clinical lectures to the class attending the summer course of instruction in the Chicago Medical College (Medical Department of Lind University), thereby enabling the students to study the disease practically in all its stages. He related an aggravated case of erysipelatous inflammation of the face (except the chin), the ears, the mastoid spaces, and part of the scalp, occurring in an adult male patient, an interne of the Mercy Hospital of that city. The second, also an erysipelatous case, was an adult female in the same charity, the malady affecting the same portions of the body as in the preceding case. Case III. was that of another adult female in the same charity; had miscarried when four months *enceinte*. On the third day after her miscarriage severe uterine phlebitis established itself. All these cases were treated very successfully by the use of sulphite of lime in ʒj. doses every three hours. The nourishment in all three cases was chiefly milk porridge and animal broths.

In commenting on these cases, it was not claimed that they were sufficient to establish the efficacy of sulphite of lime in the treatment of diseases dependent on blood-poisoning or degeneration. But they do show that the remedy may be given in large doses with perfect safety, and, taken in connexion with the cases related by Dr. Fisher, it is rendered highly probable that the sulphites will be found exceedingly valuable in the treatment of a whole class of severe and often fatal diseases. On motion, the Society adjourned to three P.M.

AFTERNOON SESSION—THIRD DAY.

Thursday, 3 P.M.

The Convention assembled and was called to order by the President at three P.M. The minutes of the morning session were read and approved.

A letter was read from Dr. Russell, of Ohio, asking to be excused from further service on a special committee to report on "Stimulation in Fracture." Request granted.

A similar communication was also read from Prof. Sage, of Michigan, wishing to be excused from a special committee on Blood Corpuscles, and disposed of in the same manner.

Dr. N. S. Davis offered an amendment to the Constitution, providing for the appointment of one permanent Secretary. Under the rules of the Association the amendment lays over one year. The Committee on Nominations reported the appointment of numerous gentlemen to act upon various matters that might come before the next annual meeting. The report was accepted, and committee discharged.

Dr. Hubbard moved an addition of one from each State be made to the Committee on Necrology. Carried.

The following resolutions were offered by Dr. Arnold, of New York, and carried:—

> *Whereas*, The railroad is fast becoming the great medium of land travel in all parts of the world; and whereas, in spite of all regulations and care, serious accidents are continually occurring, attended with loss of life, such being greatly augmented by the total want of any local medical provision to meet such, as well as by the absence of any appliances whatever calculated to strengthen the hands of the surgeon; therefore be it
>
> *Resolved*, That such medical provision shall be made by the railroad; and that by the diminution of suffering, as well as by the saving of life, while economy would accrue to the railroad companies, the interests of humanity would be greatly served.

Dr. Hibbard, of Ind., offered the following amendment of the Constitution:—

> That the President and Vice President of this Association elected each year, shall assume the functions of their respective offices at the beginning of the meeting of the year next succeeding their election.

Under the rule the proposed amendment will lie over till next meeting.

Dr. McGugin, of Iowa, from the committee appointed to memorialize Congress on the subject of relative rank and pay of army surgeons, made a lengthy report, and, on motion, the report was accepted and adopted.

On motion of Dr. Griscom it was ordered that the report be printed and distributed to the members of Congress, heads of departments, and others likely to influence action upon the subject.

Dr. Wing offered the following as an addition to the memorial, which was adopted:—

> *Resolved*, That it be recommended that, in carrying out the object of this memorial, every promotion shall be attended by a suitable examination into his qualification, and the merits of his military record.

Dr. Homberger, of New York, offered the following resolution, which was, on motion of Dr. Prince, referred to the Committee on Medical Education for the coming year:—

> *Resolved*, That the American Medical Association recommend to the Faculties of Medical Colleges in this country, to create Chairs of Ophthalmology, recently so importantly advanced by the invention of the ophthalmoscope.

On motion of Dr. Hubbard, of New York, the Association adjourned *sine die*.

Massachusetts Medical Society.—The annual meeting of this Society will be held in the Berkshire Medical College, Pittsfield, on Wednesday, June 17th, at 10 o'clock A.M. The Annual Discourse, at 12 o'clock M., *precisely*, by Dr. Morrill Wyman, of Cambridge. The Anniversary Dinner will take place at West's Hall, at two o'clock. Literary Gentlemen interested in Medical Science, and students in medicine, are invited to hear the Annual Discourse. The Western Boston and Worcester, and Connecticut River Railroads, have agreed to an abatement of one half the regular fare from any point on those roads to Pittsfield, and back, going on the 16th and 17th, and returning on the 17th and 18th of June, in favor of the members of the Mass. Medical Society desirous of attending the meeting.

American Medical Times.

SATURDAY, JUNE 13, 1863.

ASSOCIATION OF MEDICAL SUPERINTENDENTS OF THE INSANE.

The Medical Superintendents of the Insane have had their annual meeting. They have discussed, as usual, many of the peculiar diseases of the insane, and much mutual benefit has been derived from this interchange of opinion. We read the proceedings of their annual meetings with great interest, and commend the zeal with which individual members study the intricate questions of psychology. But it has not unfrequently occurred to us, that too much of the time of the sessions is occupied with the discussion of mental diseases, and too little with those more practical subjects which relate to the physical well-being of the insane. We do not desire to discourage the study of cerebral pathology; such knowledge lies at the very foundation of rational therapeutics. But we would have medical superintendents consider those subjects which appertain to the immediate care of the insane, and which they alone are capable of establishing upon a proper basis. Some of these questions we propose to bring to the attention of the members of the Association, and we would ask for them a respectful consideration.

1. Can they not devise some plan by which the unrecognised forms of insanity, so prevalent in the community, shall be properly treated? Almost daily we read the sickening details of horrible domestic tragedies, enacted by an insane person who has been known to act *strangely* for months, perhaps for years. The newspaper of to-day contains the following:—

> Horrible Affair — A Husband Murders his Wife, Child, and Himself.—This morning the members of the family of Wm. Steele, of East Hartford, on going to his room found his chamber deluged with blood, and Mr. Steele lying dead on the floor, with his throat horribly cut. His wife was on the bed, with her throat cut from ear to ear, and an infant, six months old, had its head almost cut off. All were dead—the child still warm. Steele's hand grasped a razor, and it was perfectly evident that he had murdered his wife and child, and then killed himself. The Coroner's Jury rendered a verdict of insanity. Mr. Steele had been an inmate of an insane asylum at different times during the last twenty years. His age was 53 years.

We could multiply *ad infinitum* these instances of wholesale murder by individuals who not only have not been restrained of their liberty, but who are allowed to indulge the very passions which ultimately lead to the committal of crime. There can be no doubt that public and domestic security require that this class of insane should be promptly placed under medical care, and suitable means taken to prevent crime, and relieve the equilibrium of an unbalanced mind. It is a subject of the very first importance to the community, and one which professed alienists are alone qualified to discuss intelligently.

2. Medical Superintendents should interest themselves in securing better treatment of the poor insane scattered through the jails, prisons, alms-houses, and eleemosynary institutions of the country. To-day the poor-houses of the country are vocal with the groans and curses of the poor insane. Ignorant and often brutal overseers treat these helpless inmates with a neglect and cruelty which should shock the sensibilities of a savage. In the most enlightened communities of this and other States, these poor creatures are chained in damp, gloomy, and filthy rooms, from which they are never allowed to emerge. Fresh air, sunlight, and green fields, the true restoratives of a mind diseased, they never enjoy. Is there no remedy for this crying evil?

3. Every State should have its well established Lunacy Commission. In this State great efforts have been made to accomplish this most desirable result, but all efforts have proved unavailing, except so far as the creation of a proper public opinion. If such Commissions, composed of qualified persons, were in active operation in each State, the insane would soon be cared for, and litigated questions in the jurisprudence of insanity would be promptly and correctly settled. And yet the Association of Medical Superintendents seems to take no interest in securing the proper legislation. A strong representation from this body by a report would go far towards securing the establishment of Lunacy Commissions.

4. Have we reached in this country the very ultimatum of asylum management? We might infer that such is the case, from the interest which the Association manifests in this matter. A beautiful country location, and an expensively built stone edifice, comprise the groundwork of an American Asylum for the Insane. If grounds are attached, they are designed to give picturesqueness, and are limited to unfrequented walks, or perhaps a small and unproductive farm. The great and vital question of treating the insane in the open air, and so employing them as to restore health, and yet make these institutions self-supporting, is not sufficiently understood in the United States. It is the system which must yet be adopted everywhere in this country, especially where lands are abundant and cheap. No one who reads the instructive letter of Prof. Lee, on the Colony of Fitz-James, near Paris, published in the Medical Times a few weeks back, can doubt the importance of establishing our asylums on a similar basis.

We have ventured to call the attention of our brethren engaged in the practical study and treatment of insanity, to these subjects of ordinary everyday interest, in the hope that they will give the powerful aid of their influence towards effecting much-needed reforms and improvements. In our opinion, no more earnest and devoted body of scientific men meet among us than those who have in charge the interests of the insane. The field of practical usefulness to which they devote their lives is too much shunned by philanthropists, and is in general regarded with aversion by society. The poor lunatic is a hopeless exile from his friends and family, an object of fear and abhorrence in whatever community he happens to fall ill. How elevated, how Christ-like is that charity which gathers these wandering, wayward sheep into the fold, binds up the bruised spirit, soothes the aching temples, and calmly reassures the trembling, faltering step. It should not satisfy gentlemen engaged in this noble calling, to convene in annual sessions from their beautiful asylums, to read and discuss long dissertations on perhaps unpractical subjects, to eat a sumptuous dinner, and visit some well conducted institution. They should earnestly grapple with the practical questions of the day, and by concert of action secure those popular or legislative reforms which may seem desirable.

THE WEEK.

As we had anticipated, the late meeting of the American Medical Association was peculiarly interesting. Subjects of great practical importance were brought forward and discussed in an earnest and friendly spirit. Medical education was again placed in a prominent position, and will, we hope, even come under the annual consideration of the Association. The recent order of the Surgeon-General, striking calomel and tartar emetic from the supply list, was discussed with great animation. Many other subjects relating both to the Army and to the profession were very thoroughly reviewed. The Association seems to have renewed its existence with great vigor. Nearly as many States were represented as at any former period. At the next annual meeting, to be held in New York, it will receive a still more powerful impulse.

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We have received the first number of *The Sanitary Reporter*, published by the U.S. Sanitary Commission, at Louisville, Ky. It is conducted by Dr. J. S. Newberry, and is designed "for gratuitous distribution among soldiers and societies, and that portion of the people of the Loyal States who care to be informed as to the objects and works of the Sanitary Commission, and who desire fresh and reliable information as to the state of the Army—its necessities, and the best way to supply them." This number contains several interesting reports from medical inspectors on the condition of the armies in the Western Department, with detailed statements of the operations of the Commission to supply the necessities of the sick. The *Reporter* is a very timely publication, and is destined to distribute a large amount of useful information both among the people and the soldiers.

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The transportation of persons sick of contagious diseases in ordinary vehicles is beginning to attract deserved attention. Small-pox and similar diseases are undoubtedly largely distributed among the people through public conveyances. The Commissioners of Charities and Corrections are endeavoring to secure the passage of a City Ordinance which will establish the certainty of conveying the sick of contagious diseases in carriages especially set apart for that purpose.

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The *Medical and Surgical Review* is the title of a new medical journal published at Melbourne, Australia. It is well printed, and contains the usual variety of original articles, reviews, retrospect, etc. It is edited by James Keene, late Surgeon of the West London Hospital, and published by E. F. Baillière.

Obituary.

GEORGE LEWIS, M.D.

Dr. Lewis was a native of Naugatuck, Conn. He commenced the study of medicine in his native town, attended a course of lectures at the Dartmouth Medical College, N. H., and graduated at the College of Physicians and Surgeons, New York, at the session 1850–51. He immediately commenced practice in this city, and after several years acquired a lucrative business. Some three or four years ago, while actively engaged in practice, he had the first premonitions of the development of pulmonary phthisis in his system, a disease to which he had a strong hereditary predisposition. The disease made but slow progress, and he for a considerable time has continued in practice. He was finally compelled to seek another climate, especially for winter residence, and after much inquiring selected Minnesota. He passed the winter of 1861–62 at St. Paul, and enjoyed such remarkably good health, that he returned to that city in the fall of 1862 with the intention of making it a permanent residence. The past winter, however, was not as favorable to him. He first had an attack of pneumonia, from which he recovered. Subsequently he was attacked with pleuro-pneumonia, which proved fatal on the 24th of April last, at the age of 39.

Dr. Lewis was a man of the highest moral tone, a warm and generous friend, and a Christian. He was ardently devoted to his profession, and most attentive to his patients. His contributions to medical literature were few, but highly important. In 1857 he published in the *New York Journal of Medicine* a very elaborate statistical article on Perforation of the Appendix Vermiformis. During the last year he published in the *American Medical Times* valuable articles on the Climate of Minnesota. His attention having been called to the relations of phthisis to climate, he had commenced a thorough systematic and very philosophical study of this subject, and had he lived he would doubtless have produced a valuable work. He had already prepared a preliminary paper, which he did not live to revise.

Whatever may be our sorrow at the loss of the fathers in the profession, it should be twofold greater when the young who combine high professional qualifications with the most exemplary moral character, are suddenly removed from the stage of action.

Army Medical Intelligence.

Surgeon-General's Office,
Washington City, June 1, 1863.

Hereafter the same monthly report of sick and wounded required by regulations from General Hospitals, will be forwarded to this office through the Medical Director, from all separate brigade divisions, or corps divisions which hitherto have not been required to send such reports. Where brigade hospitals are constituted into division hospitals, or division hospitals into corps hospitals only, consolidated monthly reports will be required.

The provisions of this order are intended to apply to every detached hospital, and hospital transports.

Where such reports have not already been sent, they will be prepared from the records of the hospital to date from its establishment.

Jas. R. Smith,
Act. Surgeon-General.

ORDERS, CHANGES, &c.

Dr. William Frothingham, of Scranton, Pa., has declined the appointment of Assistant Surgeon of Volunteers.

Surgeon Lewis Dyer, 81st Illinois Vols., dismissed by Special Orders No. 158, current series, from the Adjutant-General's Office, has been under special circumstances, and upon the recommendation of Major-General McPherson, commanding 17th Army Corps, restored to the service, provided the vacancy has not been filled.

By direction of the President, Assistant Surgeon Washington Bury, 122d Pennsylvania Vols., has been dishonorably mustered out of service, to date when his regiment is mustered out, for neglecting the sick at the battle of Chancellorville.

The muster into service of T. B. Drake, as Assistant Surgeon, 1st Arkansas Infantry, has been revoked, and he is discharged the service from the date of muster in for incompetency, the appointment having been made without competent authority.

Surgeon E. E. Atkinson, 2d Regiment, Eastern Shore, Maryland, Vols., has been honorably discharged the service of the United States on account of physical disability.

So much of Special Orders 39, current series, from the Adjutant-General's Office, as honorably discharged from the service, on account of ill-health, Surgeon George Kemble, U.S.V., has been revoked, and he has been restored to his position in the army.

So much of Special Orders 197, current series, from the Adjutant-

General's Office, as dismissed Surgeon James D. Hewitt, 107th New York Vols., Surgeon S. M. Hand, 137th Pennsylvania Vols., Assistant Surgeon J. B. Ashcorn, 126th Ohio Vols.—the two former "for absence without proper authority," and the latter for "accepting bribes for procuring discharge of soldiers"—is amended to read: Surgeon James D. Hewitt, 119th New York Vols., Assistant Surgeon S. M. Hand, 137th New York Vols., Assistant Surgeon J. P. Ashcorn, 116th Pennsylvania Vols.

Assistant Surgeon A. J. Maloney, Mississippi Marine Brigade, having tendered his resignation, is hereby honorably discharged the service, on account of physical disability resulting from disease of the lungs.

Surgeon C. B. Frost, 15th Vermont Vols., having tendered his resignation, has been honorably discharged the service of the United States, to date May 8, 1863.

So much of Special Orders 204, current series, from the Adjutant-General's Office, as discharged Surgeon N. P. Monroe, 20th Maine Vols., from the service, for declining to submit to an examination by a Medical Board, has been revoked, and he, having tendered his resignation, is hereby honorably discharged the service of the United States, to date May 18, 1863.

Surgeon Josiah Simpson, U.S.A., and Surgeon C. C. Cox, U.S.V., have been designated by the Surgeon-General to represent the Medical Department, U.S.A., at the meeting of the American Medical Association, to be held at Chicago, Ill., June 2, 1863.

Assistant Surgeon F. T. Dade, U.S.V., is on leave of absence for 20 days in New York city.

Surgeon B. A. Vanderkieft, U.S.V., has been placed in charge of St. John's College Hospital, Annapolis, Md.

Surgeon T. P. Gibbons, U.S.V., has been granted leave of absence for 30 days for the benefit of his health.

Assistant Surgeon Franklin Gruhe, U.S.V., has been assigned to duty with the First Brigade of the Volunteer Division, Artillery Reserve, Army of the Potomac.

Surgeon Abram L. Cox, U.S.V., is at Orange, N. J., on 20 days' leave for the benefit of his health.

Surgeon D. W. Bliss, U.S.V., has been reinstated in charge of the Armory Square Hospital, by order of the Secretary of War.

Surgeon W. H. Gobrecht, U.S.V., has been assigned to the charge of the Seminary Hospital, at Covington, Ky., and to duty as member of the Board for the examination for discharge in the Hospitals at Cincinnati, and Covington, Ky.

The following assignments to duty of Medical Officers have been made:

Surgeon F. A. Keffer, U.S.V., now on duty at the General Hospital, West Philadelphia, Pa., and Assistant Surgeon H. A. Schlaefflin, U.S.V., to report to Major-General Banks, commanding Department of the Gulf.

Surgeon W. A. Conover, U.S.V., now on duty at Alexandria, Va., to report to the Medical Director, at Fort Monroe, Va.

Surgeon D. J. McKibbin, U.S.V., now on duty at Hilton Head, S. C., and Assistant Surgeons William Carroll, W. O. McDonald, and C. J. Kipp, U.S.V., to report in person to Major-General Rosecrans, commanding Department of the Cumberland, and by letter to Assistant Surgeon-General Wood, at St. Louis, Mo.

Assistant Surgeon J. M. Pittlaos, U.S.V., to report in person to Surgeon Thomas A. McParlin, U.S.A., in charge of General Hospital at Annapolis, Md., and by letter to Surgeon Simpson, Medical Director, at Baltimore, Md.

Assistant Surgeon J. B. Bellanges, U.S.V., to report to Major-General Foster, commanding Department of North Carolina.

Assistant Surgeon W. A. Banks, U.S.V., to report in person to Major-General Grant, commanding Department of the Tennessee, and by letter to Assistant Surgeon-General Wood, at St. Louis.

Medical Inspector Augustus C. Hamlin, U.S.V., now on duty in Washington, D. C., to relieve Medical Inspector G. W. Stipp, U.S.A., in the Department of the South, the latter on being relieved to report in person to the Secretary of War.

Surgeon D. W. Wainwright, U.S.V., now on duty in the Middle Department, and Assistant Surgeon C. B. White, U.S.A., now on duty at Pittsburgh, Pa.; to report in person to General Grant, for duty in the Department of the Tennessee, and by letter to Assistant Surgeon-General Wood, at St. Louis, Mo.

Surgeon J. J. Milhau, U.S.A., now on duty in Philadelphia as a member of the Army Medical Board, which will shortly adjourn, to report for duty to the Medical Director, Army of the Potomac.

Assistant Surgeon G. W. Hogeboom, U.S.V., to report for duty to the General commanding the Department of the Cumberland, and by letter to the Assistant Surgeon-General at St. Louis, Mo.

Surgeon G. W. Martin, 14th Maine Vols., has been mustered out of service, from July 17th, 1862, the date he joined for duty, he having been irregularly commissioned.

A Board, to consist of Surgeon Chas. McDougall, Surgeon E. L. Abadie, and Assistant Surgeon H. L. Sheldon, U.S.A., has been ordered to assemble at West Point, N. Y., on the sixth inst., to examine into the physical qualifications of the members of the graduating class. On the completion of this duty a report of the proceedings of the Board will be made to the War Department, and a special report in the case of any individual thought to be wanting in the ability requisite for the military service. The same Board will continue in session, until it has examined into the physical condition of all newly appointed cadets who may present themselves, and will report their proceedings to the War Department. The junior member will act as recorder of the Board.

The Board for the examination of candidates for the appointment of Assistant Surgeons of Volunteers, consisting of Surgeons A. P. Mylert, R. L. Stanford, and M. Goldsmith, recently in session at Louisville, Ky., has been dissolved, and a new Board convened at Cincinnati, O., for the same purpose, by order of the Surgeon-General. Surgeons J. T. Carpenter, W. A. Gobrecht, and Assistant Surgeon E. Freeman, U.S.V., are members of the Board.

Assistant Surgeon E. Freeman, U.S.V., has been relieved from duty on the Board of Examiners now in session at Cincinnati, O., and Assistant Surgeon Wm. Grinsted, U.S.V., has been detailed in his place.

There are one hundred vacancies in the Corps of Surgeons and Assistant Surgeons of Volunteers.

Surgeon Norman Gay, U.S.V., has been assigned to duty as Medical Director, Left Wing, 16th Army Corps, Headquarters, Jackson, Tenn.

Surgeon S. S. Mulford, U.S.V., has relieved Surgeon Thomas M. Getty, U.S.A., as Medical Director, 4th Army Corps, at Yorktown, Va.

Surgeon H. J. Churchman, U.S.V., is sick at the Officers' Hospital, Memphis, Tenn.

Surgeon C. W. Hornor, U.S.V., has been assigned to duty in charge of General Hospital No. 23, Nashville.

Surgeon W. Clendenin, U.S.V., is sick, and under medical treatment at Nashville, Tenn. He has also tendered his resignation on account of feeble health.

Surgeon D. W. Hood, U.S.V., Medical Director, General Peck's Command, at Suffolk, Va., was captured by a scouting party from the 2d Mississippi (rebel) regiment, while returning from an expedition on the Blackwater, May 16, 1863. Was taken to Richmond, and confined in the Libby Prison until May 23d, when he was released unconditionally. He has returned to Suffolk, and resumed his duties.

Surgeon C. F. H. Campbell, U.S.V., has resumed his duties as Medical Director, 1st Division, 8th Army Corps, after a short leave of absence.

Surgeon Henry Palmer, U.S.V., is on detached service, conducting convalescents from Baltimore, Md., and York, Pa., to the General Hospitals at Pittsburg, Cincinnati, and Indianapolis.

Surgeon Zenas E. Bliss, U.S.V., is performing the duty of Medical Purveyor at Baltimore, Md., during the absence of Surgeon C. C. Cox, at Chicago, as delegate to the American Medical Association.

The General Hospitals Calvert Street and Continental Hotel, Baltimore, Md., have been closed.

Assistant Surgeon Wm. Threlkeld, U.S.V., has been assigned to duty in General Hospital No. 15, Nashville, Tenn.

Assistant Surgeon W. S. Frink, U.S.V., has been transferred from General Hospital No. 18 to General Hospital No. 20, Nashville, Tenn.

Surgeon W. H. Thorn, U.S.V., is temporarily on duty as Medical Director, 11th Army Corps.

Assistant Surgeon Frank Meacham, U.S.V., has been assigned to duty in General Hospital No. 9, Louisville.

Surgeon Henry Janes has been assigned to duty in charge of General Hospital, 6th Army Corps, at Potomac Creek, Va.

Assistant Surgeon C. E. Swasey, U.S.V., has been placed on duty in Washington, D. C., attending sick and wounded officers of Volunteers.

Assistant Surgeon E. Y. Chase, C. C. Dumreecher, D. B. Sturgeon, H. A. Schlaefflin, and J. W. Pittinos, U.S.V., have been appointed Surgeons.

Drs. Robert Reyburn, of Pennsylvania, S. E. Fuller, of Connecticut, George F. French, of New Hampshire, Wm. C. Bennett, of Connecticut, and P. A. O'Connell, of Massachusetts, have been appointed Assistant Surgeons of Volunteers.

By direction of the President, Surgeon C. D. Moore has been dismissed the service of the United States with loss of all pay and allowances for giving certificates of disability for discharge in cases of enlisted men on insufficient grounds.

The appointment of Assistant Surgeon A. C. Schwarzwelder, U.S.A., has been revoked by direction of the President.

A new General Hospital, called the Shumard Hospital, has been opened at Hickman, Ky.

Surgeon R. M. S. Jackson, U.S.V., has been assigned to duty as Medical Director, 23d Army Corps, Lexington, Ky.

Medical News.

Rhode Island Hospital.—An adjourned meeting of the corporators and friends of the proposed Rhode Island Hospital was held in the Common Council chamber, His Excellency Gov. Smith in the chair.

Dr. S. B. Tobey, for the committee appointed at the last meeting to devise and recommend measures to secure the establishment of this important charity, presented their report. The committee have visited various hospitals in Boston, New York, and Philadelphia, and as the result of their investigations present the following propositions:

1. That the proposed Rhode Island Hospital should be designed to be in all respects an institution of the very first class.
2. That its capacities should at the outset be adequate to the accommodation of not less than seventy-five patients, and that its building be constructed with special reference to future enlargement.
3. That it ought to be provided with separate accommodations for the sexes—to admit of a judicious classification of patients, and the isolation of particular cases, and that it should be furnished with the most approved arrangements for the supply of water—for warming—for ventilation—for cooking, and for the laundry, and also with a hall for a chapel.
4. That such a building or buildings with the requisite appurtenances described, may be expected to cost not less than one hundred thousand dollars.
5. That the establishment thus contemplated will require to be endowed at the beginning for its adequate support with a permanent fund of not less than $150,000.
6. That it is expedient to delay the further organization of the corporation under the charter till the enterprise has reached a more advanced stage of its progress.

Wm. Binney, Esq., presented a communication, proffering to the Corporation, in behalf of different parties, the sum of one hundred thousand dollars, subject to certain prescribed conditions.

Original Lectures.

DISEASES OF THE RESPIRATORY ORGANS IN CHILDREN.

BEING A COURSE OF LECTURES PREPARED FOR DELIVERY DURING THE SPRING SESSION OF 1862 IN THE COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.

BY THE LATE
C. VAN ALEN ANDERSON, M.D.,
PHYSICIAN TO CHILDREN'S DEPARTMENT, DEMILT DISPENSARY, N Y.

LECTURE II.—PART II.

CROUP, ITS SYMPTOMS, ETC.

In thirty cases of Trousseau's, thirteen were from eleven months to three years of age, eleven from three to five years, and six from five to twenty-six. Trousseau has also observed it in persons much advanced in life, and on one occasion performed tracheotomy upon a woman of forty. It is observed more frequently among boys than girls; it also usually occurs but once in the same person, though several observers have furnished remarkable instances of its recurrence. That it is frequently epidemic in its nature is beyond all doubt, though this reveals itself especially in limited localities. Bouchut remarks that at Paris, "there is no general epidemic; partial epidemics are observed developed in a quarter, in a house, or in a hospital devoted to infants." But it oftener appears in a sporadic state, and it is in this condition that it is commonly seen.

In addition to this occasional epidemic disposition of the disease, there are other causes. Thus, locality has a great influence over it, for it prevails to a greater extent in northern than in southern countries, and there is even a difference in this respect between the northern and southern portions of England: residence near the sea, or near the mouths of large rivers, a moist soil, and a damp atmosphere, have been regarded as favorable to its existence. Constitutional aptitude in children of an irritable, nervous disposition, is a predisposing cause, as is also the season of the year, for it is much more frequent in winter than in summer, owing perhaps to the variableness of the weather, and the prevalence of east and north-east winds. The manner in which children are dressed in the present age of civilization and enlightenment—the partiality manifested for trying experiments upon their delicate systems by leaving their arms, legs, and necks in the condition described by the poet as "clothed on with chastity," that is, not clothed at all, is extremely favorable for the production of croup. Says Dr. Eberle, speaking of a German settlement, "they are in the habit of clothing their children in such a manner, as to leave no part of the breast and lower portion of the neck exposed. During a practice of six years among this class of people, I recollect having met but a single case of this affection, and this case had occurred in a family who had adopted the present universal mode of suffering the neck and superior portions of the breast to remain uncovered." The suppression of cutaneous eruptions, moreover, the breathing of noxious gases, and the swallowing of boiling water, are also causes of the disease; it follows, too, epidemics of influenza and scarlatina; several authors assert that it is contagious, but this is denied by the majority of writers, and is, in fact, a feature of the diphtheritic form. A predisposition to croup is sometimes hereditary, produced under various conditions arising from previous attacks, a repetition of which increases the susceptibility to invasion. Dr. Dickson of South Carolina says, "this susceptibility became so great in one child under my care, that she did not escape an access for an entire fortnight, during a period extending from her being weaned to her fifth year." He is also disposed, from his own experience, to attribute it occasionally to the presence of undigested food, and other crudities in the stomach.

Various *kinds* of croup have been described, depending on the predominance of particular symptoms. M. Bland makes three degrees, which he has distinguished by Greek designations. They are, first, myxogene, where mucus is expectorated; second, piiogene, where pus is effused; and third, meningogene, where the false membrane is formed. Some authors speak of catarrhal, spasmodic, and inflammatory croup; some, as Mr. Ferrier, of acute and spurious. Dr. Stokes regards it as primary and secondary; the latter being an extension from neighboring parts, or a complication with other diseases. Dr. Churchill thinks, "that most of these distinctions are only differences in degree, or the predominance of certain characters over others; the only invariable one, if the disease be allowed to run on, being the inflammation and the false membrane. Experiments, made by Schwilgue, Schmidt, Chaussier, and others, have proved that the same causes, applied to animals of the same class, have given rise to each variety, according to the peculiar constitution and age of the animal." Bouchut defines it as "that disease of the larynx, in which the inflamed mucous membrane is covered by a fibrinous layer of new formation, which is called false membrane;" and Guersant, as a disorder in which the internal surface of the pharynx, and consequently that of the larynx, the trachea, and the bronchi, is covered by membranous or pseudo-membranous exudations, which are easily perceived on all the parts within the reach of sight, and which the expectoration afterwards contains." Guersant, however, like his master Bretonneau, confounded true croup with diphtheria.

Definition, however, is description. We cannot therefore define any disease completely, because we do not, in the present state of science, know what any pathological state really is; we only know some of the phenomena by which it is manifested. In studying inflammation, for example, we have a condition characterized roughly by pain, redness, heat, and swelling, and in which the microscope displays to us certain changes in the circulation of the blood. We learn by clinical observation the various symptoms it produces in the different organs of the body, and by pathological research the changes it leaves after it has run its course; but as to its intimate and essential properties we are as much in the dark as we were in the days of Hippocrates. It is so with all diseases; we cannot define them perfectly, for we do not know them, but we can enumerate their symptoms and investigate their morbid anatomy, which is what I propose to do with croup.

For the sake of convenience the course of the disorder may be divided into three stages, viz. first, the precursory, second, the stage of development, and third, the stage of collapse, or of threatened suffocation.

The symptoms of the precursory stage are those of a common cold. It begins with slight shivering and uneasiness, which, however marked they may be in childhood, are usually unperceived in infants at the breast. The child becomes cross and restless, the skin is hot, the pulse quick, the thirst increased, and these phenomena are frequently attended by sneezing, lachrymation, and cough. Occasionally, there is slight sore throat, or an uneasy sensation about the larynx, which, however, do not seem sufficiently important to attract much attention. But there is always a change in the voice, a degree of hoarseness, or rather huskiness, as if the throat wanted clearing; and this hoarseness has been much dwelt upon as affording an unfailing sign of the invasion of croup. If we look into the throat, we discover there no evidence of disease; the tongue is coated but moist, the number and character of the respirations depending upon the greater or less intensity of the fever. On percussion the chest is resonant, and if we auscultate with the greatest care, we can detect no abnormal sounds in the lungs. When, then, you notice these symptoms in a family or district where you may fear the prevalence of croup, always be upon your guard, especially if you notice that your patient is hoarse.

The duration of this precursory stage is very variable, extending from a few hours to a day or two, but usually it does not last more than eighteen or twenty-four hours. Sometimes the transition to the second, or stage of development, is sudden and strongly marked, but in the majority of cases it takes place gradually. The symptoms which have already been mentioned, increase towards evening; a slight change is observed in the tone of the cough, which acquires a ringing or brassy sound, difficult to describe, but when once heard not easy to forget. But still there is nothing about the patient that would alarm an ordinary spectator; it appears to be suffering from a slight cold, and when bedtime comes goes to sleep as usual. But its slumbers are not undisturbed; it is awakened in the course of the night by a sense of suffocation, a ringing cough, stridulous breathing, dyspnœa, anxiety, and alarm. It is remarkable that the accession of these serious symptoms is almost invariably in the night, and that throughout the whole course of the disease there is a tendency to nocturnal exacerbations, and to remissions in the morning. This, though not easily explained, is perhaps an example of the liability of nervous and convulsive disorders to appear during the hours of darkness. The fever is now increased, the skin becomes hot and dry, the face flushed, the pulse full and quick, and the child dull, fretful, and passionate. The respiration is hurried, and soon becomes difficult; often the inspirations, particularly those which follow the cough, are crowing. For a few moments the distress of the child may be relieved, but the dyspnœa soon returns, the whole chest works with the respiratory effort, and the stridor is louder and more prolonged. The patient's voice is hoarse and gruff; he shows great restlessness, he tries to relieve himself by tossing about in his bed, or by getting out of it; but no change of position can soothe his sufferings or diminish his alarm. After this condition has lasted for a few moments there is an interval of comparative ease, during which he falls into a restless, uneasy, interrupted slumber, the crowing inspiration being heard in an exaggerated degree. In a little while he is again awakened by the suffocation, and the cough and the terror, these paroxysms continuing until the morning.

This stage, then, furnishes three of the pathognomonic symptoms of true croup, viz. the hoarse voice, the peculiar inspiration, and the peculiar cough. The sound of the cough is one which you will very quickly learn to recognise. It has been compared to the crowing of a cock or the bark of a dog; and to the noise produced by coughing into a brazen trumpet, for there is a hard metallic character about it which has been distinguished by the epithet "brassy." This cough very often precedes any change in the respiration, and escapes the notice of those unaccustomed to it until the disease becomes fully developed. The respiration soon undergoes a transformation as remarkable as that which occurs in the cough. The inspiration is prolonged, and attended by a sound which is called crowing; though this word does not fairly convey the idea which is meant, and perhaps it is better to speak of it as stridulous. The voice is hoarse or cracked, or, in very young children, from the invasion of the second stage becomes totally suppressed. I need hardly explain to you that this brassy cough, this stridulous inspiration, and this hoarse or cracked or suppressed voice, are to be attributed to the fact that the air is forced through a smaller orifice than usual, and that all these symptoms depend on a narrowing of the rima glottidis. The sight of the child laboring under this stage of croup is truly a distressing one. Dr. Churchill graphically describes the sad spectacle that you will be called upon to witness many times in your professional career, and never, I am sure, without having your profoundest sympathies aroused. "The paroxysms of coughing become more frequent and spasmodic, during which the inspiration is almost suspended, and the heart's action accelerated. The difficulty of respiration and the consequent efforts on the part of the child are very great; the countenance is flushed, sometimes almost livid, and covered with sweat; the hands are clenched, the arms thrown about, all covering rejected, and whatever might impede the access of air hastily removed. The body is sometimes erect, sometimes recumbent, and occasionally with the head rigidly bent backwards. The eyes project, and are injected and suffused. The carotid arteries beat strongly, the pulse is quick and hard, the skin burning, and the thirst great. The little patient refers the seat of distress to the larynx, to which the hand is frequently carried as if to remove some obstruction, and where, as Dr. Ferrier has remarked, a degree of tumefaction is sometimes observed. As yet, there is scarcely any expectoration." During this stage the fauces are red, but the redness does not bear any proportion to the violence of the symptoms; deglutition is easy, for the child swallows the frequent draughts of water which he demands without any apparent difficulty; the bowels are disposed to be confined; the appetite for food is entirely lost; and the tongue, though red at its tip and edges, is covered in its middle portions and towards the back with a heavy white coat.

Auscultation of the chest affords us in some instances negative, in others positive signs. In simple and uncomplicated cases, where the trouble is confined to the larynx and trachea, the thorax sounds clear on percussion, the breathing is hurried and unequal, but still the vesicular murmur is more or less distinguishable, and we may measure to a considerable extent the amount of the obstacle there is to the entrance of air into the lungs. At the same time the stridor and sibilant breathing produced in the larynx come clearly to the ear through the pulmonary tissue. These sounds may continue unchanged through the whole course of the disease, with the exception that as the rima glottidis becomes more obstructed the respiratory murmur grows feebler, though the resonance on percussion remains unchanged. You will very seldom, however, have the good fortune to meet a case of croup unconnected with some disease of the rest of the air passages, so that the sonorous, sibilant, and mucous râles of bronchitis, or the fine crepitation of pneumonia with impaired resonance on percussion, will present themselves to your notice. Be careful when you auscultate, for air may enter the lungs so imperfectly as not to give you these signs unless the child make a deep inspiration after a fit of coughing.

Some French writers remark that at a certain period of the disease, on putting the stethoscope over the larynx, we may hear a peculiar vibration as of something flapping to and fro in the windpipe, which they consider always indicates the existence of loose false-membrane. They consider this to be a favorable sign, indicating that the pseudo-membranous formations are loosely attached, and therefore easily removable by expectoration, provided it be confined to the larynx; if, on the other hand, it extend to the trachea and bronchi, it affords an evidence of the extent of the morbid concretions. Dr. West found this sound in a case in which no false membrane was either expectorated during the patient's lifetime, nor discovered in her inflamed larynx and trachea after her death.

You will perceive, therefore, that although you are dealing with a laryngeal disease it is important for you to examine the lungs at each visit, because you thereby obtain either positive or negative results of great value in the treatment of the disease.

When, then, it is thus fully developed, the progress of croup is most rapid, and its advance is shown by an increase of all the symptoms. The paroxysms are less marked, or rather the intervals between them are shortened, and the child is constantly engaged in the labor of respiration. The cough becomes more difficult, suppressed or choking, or else ceases altogether; suffocation seems close at hand, and there is frequently vomiting of glairy mucus, sometimes mixed with flocculent membranous shreds. The stridor of the breathing still continues, but it begins to assume a sibilant sound; the voice becomes broken and whispering, the child often refusing to speak because the effort causes pain in the larynx, or deepens the intensity of the cough. The head is thrown back so as to increase the capacity of the tracheal tube, the larynx works forcibly up and down with each attempt at respiration, and the walls of the thorax are in violent motion. The expression of the countenance is dull, heavy, and anxious; lividity shows itself about the mouth, the extremities are cold, and the skin dry and hot, or covered with a clammy sweat.

It is during this second stage that the false membrane in the larynx and trachea which is peculiar to croup, is formed; though there are certainly no signs which announce to us the commencement of this condition. It has been discovered in the body of a child who yielded to the disease in twenty-four hours, while in other cases several days have elapsed without its appearance. Trousseau thinks that we may be assured of the existence of the membrane when the cough, having been clear, loud, and ringing, becomes less frequent, almost without sound, and suffocating. If your patient be old enough to expectorate you may sometimes acquire information in this way; shreds of lymph are occasionally thrown off with the sputa, which should in all cases be examined carefully. Dr. Swett, of this city, once saw expectorated a perfect tube, four inches in length, making a complete cast of the trachea and of its bifurcation; and Dr. Watson mentions the remarkable case of a little girl on whom tracheotomy was performed. A tubular portion of false membrane, of the shape and size of the trachea, was expelled through the artificial opening, greatly relieving the patient, but in the course of the same morning the child died of suffocation; at the autopsy the trachea was found to contain a new tube of false membrane, thus showing that this concretion may be exuded in so short a space of time as from six to seven hours. The spitting up of portions of lymph is a symptom of considerable importance, but it is not frequent, and when it does occur it is usually on the day before death. We can mention no symptom beyond this that shows when the membranous deposition actually does happen, nor is there anything to prove it a feature of any regular period of the attack; but, on the other hand, we may not doubt that it takes place at a variable time in the second stage of the disease.

After the lapse of from three to seven days, the period of collapse is reached. The lividity of the face is now increased, or else the countenance is very pale and swollen, while the frequency of the pulse and respiration is greatly increased, their power being diminished. The action of the heart, also, though quickened and convulsive, becomes more feeble. The cough, indeed, is not heard so often, but it has grown more suppressed and suffocative; sometimes it is absent altogether, while the stridor of the breathing has ceased, and is replaced by a sibilant sound, which may be heard some distance from the patient. The eyes are brilliant, the head thrown back, the pupils contracted, the orbits hollow, and the general appearance of the child expresses exhaustion. All the muscles of respiration act with great force; those of the nose, the neck, the abdomen, and the diaphragm contract violently, and the movements of the larynx are very and incessantly energetic. The veins about the neck are greatly distended, the tongue dark and coated, the lips of a purple color, or else of a livid paleness. Fits of suffocation come on even in this depressed condition; the anxiety and the distress of the face suddenly increase, the child raises itself with an effort; carrying its hands to its neck, it turns on every side and tosses to and fro, lies down and sits up, seeking in constant change of position the relief which it is impossible for it to obtain. In such sufferings as these it dies, or else ends its life in the fatal unconsciousness of coma and convulsions.

Although unfortunately in the majority of cases this is the history of an uncomplicated case of croup, it may be checked by treatment or may run a less fatal course. In such instances the fever will be less marked and the laryngeal affection much milder; still you will have the peculiar stridulous breathing, the hoarseness, and the brazen cough. If the treatment during the early stages be active and judicious, the symptoms will sometimes gradually lose their intensity, and we shall then find that respiration gradually becomes more easy, the stridulous sound little by little disappears, the voice seems more natural and parts with its gruffness, and the character of the cough is changed, for it becomes soft and moist. The circulation, also, loses its irregularity, although the fever may continue for some time after the cough and breathing have lost all croupy disposition. The patient must be carefully watched until recovery is completely established, for there is no malady perhaps that shows a greater liability to relapse, the least exposure to cold being apt to reproduce the severe symptoms upon the absence of which we congratulate ourselves. One attack of croup, too, predisposes an individual to others. Dr. Albers mentions its recurrence seven and nine times, and Dr. Churchill two, three, and four times in the same child; nor does its mildness on one occasion give us any reason to hope that it will not be severe and fatal on the next.

Original Communications.

EMBOLUS OF THE PULMONARY ARTERY.

By S. OAKLEY VANDERPOEL, M.D.,

OF ALBANY, N. Y.

The study of *emboli* having of late years attracted the attention of pathologists, I have deemed the following notes of a case which has just passed under my observation, as illustrating still further the subject, would not be without interest. In the *American Journal of Medical Sciences* for April of this year, a case is reported, which, though originating from a traumatic cause, is ascribed to a condition of the system prominent in the one under consideration, viz. a lowered force of the heart, and perhaps contractility of the vessels.

I was called to attend Mrs. O—— on the ninth of April. She was about sixty years of age, and, while not corpulent, adipose tissue was full and well distributed. There were no constitutional symptoms or marked general disturbance, but she complained of slight neuralgic pains alternating in different parts of the body; also, on attempting to rise, a sensation of great languor, and a feeling of lightness in the head. I noticed, while there was marked fairness and whiteness of the skin, there was no anæmia. I supposed it a case where nutrition was perverted; and though not decided fatty degeneration, still the molecular changes approximated that condition. Absolute rest was enjoined. She was directed to be raised only when necessary, and with care. A sustaining treatment, combined as necessary with morphine, was adopted. Improvement was gradual but marked. At my morning visit some three weeks since she complained of an unpleasant feeling in the left arm, as also that for an hour past it had been *cold;* she was obliged to keep it covered, and near a bottle of hot water.

On examination I found, while sensation was perfect, and motion no way impaired, save a feebleness in the limb, the circulation had so far ceased that no pulsation was perceptible in any part. This feeble vitality remained for over two hours, when the obstruction gave way suddenly, and circulation in all respects was as in the opposite limb. During the period of the obstruction I listened several times to determine whether any growths near the valves would, by floating off, cause the condition. Nothing abnormal could be detected.

Her general health improved so far that she rose easily from the bed, walked to the adjoining room, and sat up for some time. It was after a comfortable night, and, as she expressed it, "a more natural feeling than she had yet had," that she was seized with dyspnœa and prostration while walking into the adjacent room. I saw her very soon after: she was breathing very laboredly and rapidly; a dusky pallor was upon the surface; the heart was acting tumultuously, yet the capillary circulation was imperfect, and the extremities cold. Dr. Hun visited her in consultation during the afternoon, and suggested that the embolus was probably in the pulmonary artery. She lived about nineteen hours from the time of seizure

Post-Mortem, twelve hours after death.—The contents of the thoracic cavity (which was the only part examined) were removed entire. Upon opening the right ventricle of the heart a round, firm, fibrous band, about four lines in diameter, and some three inches in length, was found extending from the fleshy columns of the ventricle to the semilunar valves, and terminated in a bulb of black, coagulated blood, just within the pulmonary artery. Upon carefully dividing the branch of the pulmonary artery leading to the left lung, a fibrous deposit of quite firm consistence, about one inch in length, and of the diameter of the artery, was found just at the first branching of the artery within the lung, completely plugging the artery, and sending prolongations into the branches of the second size. The same condition was found upon dividing up the trunk leading to the right lung, save that the deposit on the left arterial trunk was *firmer* than the right.

The left ventricle contained a small amount of black coagulated blood; the right was *empty*. The muscular tissue of the heart was easily torn, and its outer surface covered with rather more than the usual layer of fat. The arteries showed no atheromatous deposit; the lungs were healthy, and, though not exsanguined, contained a less amount of blood than is usually found in the capillaries of the lung after death.

The microscopic appearance of the plug showed fibrillated fibrin, dense in structure, the meshes filled with hæmatine; some portions were evidently of more recent formation than others.

PUNCTURED WOUND OF THE BRAIN.

By LEWIS HEARD, M.D.

ACTING ASSIST.-SURGEON, U.S. ARMY.

Corporal John B. Buckley, of Co. D, 62d Pa. Vols., aged 24 years, was admitted into Finley General Hospital, May 9, 1863, with a wound received on the fourth of the same month in the battle near Chancellorville, Virginia. The wound, which was in the right eyebrow, presented the appearance of having been inflicted with a bayonet or some other sharp-pointed instrument, and it was found, on examination, to have penetrated the skull through the frontal sinus, and to have taken a course horizontally backwards into the brain.

I passed a straight bougie along the track of the wound into the right anterior lobe of the brain the distance of four inches, without force, and without the least pain to the patient. He appeared perfectly conscious; pulse natural, and no heat or febrile excitement. The perforation in the skull would barely admit the point of the index finger, and there were found a few small fragments of bone, which had been driven in, still hanging at its inner side. I did not think it prudent to continue the examination further. There was no hæmorrhage. Perfect quietness was strictly enjoined, a saline laxative was ordered to be given, and cold-water dressings applied to the wound. The diet was light and unirritating; and as but little could be done in the way of treatment, and as there was not the least hope of saving the patient, it was thought best to leave the case almost wholly to the powers of nature.

The patient himself was decidedly of opinion that his wound was caused by a ball, and not by bayonet, as he confidently affirms he was not in a charge, and the enemy were not very near when he received the injury. It might have occurred accidentally from a bayonet in the hands of one of his comrades. This, however, it would seem, could not well have happened without his knowledge. On this point I interrogated him a number of times, and he persistently maintained that his injury was from a ball. This was disproved by dissection.

On the 14th of May, ten days since the wound was received, he continued conscious and comparatively comfortable, complaining of but little pain or unpleasant feeling in the head. The same temporizing treatment was continued, and quietude was observed—feeling very certain as to the event of the case.

May 16th.—For the last two days he has manifested signs of mental disturbance, and vision of the left eye, as well as that of the right, seemed, in a measure, lost; and, at times, optical illusions annoyed and deceived him. More pain in the head complained of, and thirst for cold drinks very urgent. He is allowed to have whatever he desires, and care is given to make him as comfortable as possible. Bowels have been kept soluble by an occasional dose of magnes. sulph., and the water-dressings are still employed. Some discharge of pus and cerebral substance from the wound. About noon to-day was taken with a tremulous motion of the hands and arms, and reaching after imaginary objects. Complains of more pain in the head when aroused from a partial stupor into which he has fallen. Skin of natural temperature; pulse varying but little from 80 per minute, and of ordinary strength, moderate incoherence of thought and expression, scenes of the battlefield, friends, home, and many other things, alternately occupy the mind: in short, all the symptoms point unerringly to a speedy fatal termination.

May 17th.—Was comparatively quiet through the night; pulse 125 a minute, and less resisting; greater tremulousness of the hand and arms; more picking and reaching after imaginary objects; stupor increased; thirst still urgent; no appetite for food; vision nearly or quite extinct; discharge of pus and brain-substance the same. In the afternoon slight convulsions took place; vital forces gradually sinking. He died at six o'clock P.M., with but little apparent suffering.

Sectio Cadaveris, fourteen hours after death.—On removing the calvarium, the sinuses of the dura mater and other vessels were found to be highly engorged with blood. The right hemisphere of the cerebrum was sliced off from above downwards: when coming down to near a level with tho corpus callosum, a slight prominence over the right lateral ventricle was observed, which, on being punctured, gave vent to a free discharge of pus. By removing another thin slice of brain, the track of the wound was exposed. It was traced from the point of penetration through the anterior lobe, under the right edge of the corpus callosum, opening the right lateral ventricle, and penetrating as far back as the posterior crus of the fornix, which seemed to have sustained injury. The two lateral and third ventricles were filled with pus, and, in making further search for ball or other foreign substance as the cause of injury, pus was also found in the fourth ventricle, and beneath the cerebellum around the medulla oblongata. No ball or other foreign body could be discovered, even after the most diligent search had been made; and the patient must have been mistaken as to the cause of his wound.

This man lived thirteen days after receiving a wound which had penetrated more than half way through one of the hemispheres of the brain from before backwards, and yet the cerebral functions were comparatively little disturbed up to within two or three days before his death.

As there had been no vessel of any size wounded, and consequently no hæmorrhage in the brain—have we not some reason for the belief that, if a free discharge of the pus could have been obtained from the first of its formation by a sufficient opening placed dependent, he might possibly have recovered?

Finley Hospital, Washington, D. C.,
May 25, 1863.

M. Mabru of Paris offers a prize of 3000 *francs* to any medium or somnambulist who will furnish scientific proof of their being able to see through a brick wall, or read without the aid of their eyes. "It would appear," he adds, "as if *la haute Société Parisienne* falls into the trap of every juggler; is penetrated, in fact, with the same nature as the gross and half-savage rustics of our most uncivilized provinces. One believes in mediums, and the other in ghost-stories; that is all the difference."—*Dublin Medical Press.*

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, Jan. 28, 1863.

DR. D. S. CONANT, PRESIDENT, IN THE CHAIR.

HYDATIDS OF THE LIVER.

Dr. Loomis presented a specimen of hydatids of the liver with the following history:—

The patient from whom the specimen was removed was a gentleman of intemperate habits, 38 years of age, who was admitted into Bellevue on the 19th of January. He had always been well up to the first of Dec., when he was suddenly seized with an intense pain in the right side, which was accompanied with vomiting and a restlessness which forbade sleep almost entirely. There was an inability to take food, and a slight amount of delirium. He remained in this condition for about a week without obtaining sleep, and without being able to take food. He then became rapidly jaundiced, and his friends noticed a marked increase in his right side. After the jaundice appeared his pain became less, his vomiting ceased, and he was enabled to take food and retain it. But the fulness of the right side increased, and was tender on pressure. About three weeks after his first attack they began to notice that he became stupid, desiring to sleep most of the time, but when he was wakened he answered questions intelligently. The jaundice continued marked during all this time. At the time of his admission into the hospital his condition was very much like that of one under the influence of opium; his respiration was sighing, and about sixteen per minute; there was a distinct interval between each respiratory act. As he lay upon the bed, he would throw his head back as if to enable him to get a better respiration. His pulse was ninety per minute and very feeble; his pupils were slightly dilated, and acted slowly to light. The surface of his body was deeply jaundiced, and he was aroused with a good deal of difficulty, but when aroused would attempt to answer questions. He swallowed with difficulty, and then retained the fluid but a little while. Physical examination revealed nothing abnormal about his chest. On the right side over the hepatic region there was dulness from the fifth rib above down to the umbilicus, and about four inches to the left of the median line. The surface of the liver was smooth, and its borders rounded. He died in a state of coma twelve hours after admission.

Autopsy, twelve hours after death.—The body was well nourished, and of a dark brown hue. On opening the abdomen there was a small quantity of serum in the cavity of the peritoneum. The kidneys were enlarged and were very much congested; the liver was enlarged, and contained in its right lobe posteriorly a large fluctuating tumor containing about a pint of fluid, in which a number of cysts floated, from the size of a pea to a goose-egg. White dots about the size of a pin's head were scattered throughout different portions of the organ, and on microscopic examination proved to be composed of pus globules. The microscopic examination of the contents of the cysts revealed nothing but the hooks of echinococcus.

Dr. Sands remarked, that tumors of the sort in the substance of the glands of the body were rather unusual, and in that connexion referred to one situated beneath the fascia of the neck, which he had already presented to the Society. He stated that it very often happened that the hooks of the echinococcus were found alone, as that part, being calcareous, was the last to be destroyed.

AMPUTATION OF FINGERS FOR BURN.

Dr. Post presented the index and middle fingers of the right hand, with the corresponding metacarpal bones, which he had removed from a middle-aged woman who had suffered from a burn of the integuments of the dorsum of the hand five weeks before, in attempting to rescue her child from fire. The two metacarpal bones were completely necrosed, as also a portion of the metacarpo-phalangeal articulation of the index finger. The palmar surface of the hand, strange to say, was uninjured.

CANCER OF THE GASTROCNEMIUS MUSCLE.

Dr. Sands presented two specimens of cancer. The first was a tumor of the calf of the leg, which was removed from a woman aged forty years. The tumor did not project much beyond the surface, was not nodulated, and, although soft to the feel, presented no signs of fluctuation. It was proved to be connected with the muscles of the calf by the absence of longitudinal motion and the presence of free lateral motion. The growth first made its appearance about twelve weeks before the operation, and annoyed the patient rather by its size than any pain which it occasioned. There were no glandular swellings noticed in the popliteal space, nor in any other part of the body. A straight incision was made in the long axis of the limb behind, about eight inches in length. After dividing the subcutaneous fat and fascia, the diseased mass was reached. The tumor was found imbedded in the substance of the gastrocnemius muscle, and connected at its lower portion also with the soleus. Both these muscles were divided above and below the tumor before the completion of the operation.

The appearances under the microscope were very characteristic. There was a great diversity of cells, variously shaped, having large nuclei and nucleoli. There was also to be seen a large number of the so called mother-cells, containing fifteen or twenty smaller ones each, with a large nucleus and nucleolus.

CANCER OF THE KIDNEY.

The second specimen was one of cancerous kidney for which he was indebted to Dr. David Smith The patient from whom it was removed was a gentleman fifty-five years of age. He was in the enjoyment of good health until seven years ago, when he suffered from an attack of renal colic, the symptoms being referable to the right side. Two days after this he passed two small calculi. Two years after this he had an attack of renal hæmorrhage. He bled in this way twice during the two successive years. The attacks then became more frequent, and occurred, up to last spring, once every two or three months, and after that once every month. From last October he had a hæmorrhage which nearly cost him his life, the blood coagulating in the bladder and almost completely filling it. The clots were finally removed by being broken up with a catheter. Two or three weeks after a similar attack occurred, and from that time the patient never rose from his bed. It was only as late as the last spring that a rapidly growing tumor was noticed in the right side.

At death the right kidney was found to be so much enlarged as to extend from the free margins of the ribs above to the crest of the ilium below, and to the left of the median line some three inches. The opposite kidney was very much enlarged. The bladder was healthy. There was no other organ of the body the seat of the cancerous deposit. On microscopic examination the diagnosis of cancerous disease was confirmed. The extended surface of the organ was somewhat lobulated. The organ weighed four pounds and four ounces, was eight inches long, five inches broad, and four inches thick.

Dr. Post, in relation to the first specimen of Dr. Sands, stated that it was the third case of tumor developed in the midst of muscular tissue, which had come under his notice, and that the other two were fibro-plastic in character. In each of these two cases the longitudinal and lateral mobility was a very striking symptom, as indicating the confinement of the disease to the muscles. As regards the specimen of cancerous kidney he was under the impression that one as large, if not larger, could be found in the museum of the New York Hospital.

The Society then adjourned.

UNITED STATES ARMY MEDICAL AND SURGICAL SOCIETY, OF BALTIMORE.

STATED MEETING, March 5, 1863.

SURGEON C. C. COX, U.S.V., PRESIDENT, IN THE CHAIR.

[Reported by DR. GEO. H. DARE, Acting Asst. Surg., U.S.A., Secretary.]

GUNSHOT AND PUNCTURED WOUNDS OF CAVITIES.

DR. DARE commenced by remarking that wounds of the cavities were, as a class, the most dangerous which came under the care of the surgeon. The cranial, thoracic, abdominal, and pelvic cavities contained the viscera, including the vital organs; these viscera were liable to be injured by the missile or weapon penetrating the cavity in which they were contained; therefore the subject might be said to include *wounds of the viscera.* The principal cavities were all lined by a membrane extremely prone to take on extensive and dangerous traumatic inflammation.

WOUNDS OF THE CRANIAL CAVITY.

DR. DARE remarked that the brain might be indirectly injured by a missile or weapon which did not penetrate the cavity of the skull. The cranial wall being driven in, the depressed and broken fragments, acting as a foreign body, compressed and irritated the brain. When symptoms denoting compression resulted, the indication was clear; but a question not so well settled was—Whether, where there was manifest depression with probable comminution of the internal table, in absence of symptoms of depression, it was justifiable to use the trephine in anticipation of future mischief?

Guthrie's opinion was quoted—that in case of an adult, it was both justifiable and advisable. The Doctor spoke of a German Lieutenant who came to the National Hospital to have a musket-ball extracted from his head. It was found entirely imbedded in the parietal, having driven in the bone about half an inch. It was extracted with difficulty. It was then two weeks after the receipt of the injury: no brain symptoms had supervened, and, when heard from several weeks afterwards, he continued well.

As an illustration of a depressed fracture from a different cause, Dr. Dare reported the case of a man who came into the National Hospital, having been thrown from a buggy, his head coming in contact with the curbstone. The symptoms of concussion soon passed off. A fracture with depression, denoted by a well marked ridge, was discovered on the right side of the frontal bone near its junction with the parietal. There were no symptoms of depression, intellect perfect, and man cheerful. On the fifth day after admission he became somewhat comatose; he would answer questions, but irrationally and with difficulty. The symptoms becoming worse, he was, as a *dernier ressort*, trephined by Dr. D. The detached fragments were removed, and the depressed portion elevated. No marked change immediately followed the operation. The patient died within twenty-four hours.

Autopsy revealed the dura mater a little thickened under the point of fracture, but the cause of death was found to be suppuration at the base of the middle lobe of the brain, diagonally opposite on the left side at the seat of counter-stroke.

A ball might pass through the cranial wall and remain in contact with the dura mater without penetrating the brain. The Doctor cited, as a remarkable illustration of this fact, the case previously read by him before the Society, of a "gunshot wound of the cranium, followed by an abscess of the brain, caused by the presence of the bullet, resulting in death two months after the receipt of the injury," and remarked that we would naturally expect, as happened in that case, ulceration to result in consequence of continued pressure.

When the brain was extensively injured by a weapon, or by a missile either passing out or lodging, death usually resulted immediately or within a few days. Some remarkable cases were, however, recorded, in which patients survived after the most extensive injuries of the brain. The following case came under the care of Dr. Dare's former preceptor, Dr. Dunbar. A young man, out on a sporting expedition, raised his gun nearly perpendicularly and fired at a bird flying directly over his head. The gun burst, and the piece of iron by which the barrel was screwed to the stock entered about the middle of one side of the frontal bone, making a hole about two inches in diameter, and penetrating deeply into the brain, from which it was extracted by the Doctor. Some hernia cerebri resulted, but the man recovered, preserving his mental faculties entirely. He still lived, and was well.

The Doctor cited an almost exactly similar case, related by Guthrie, of a boy, nineteen years of age, from whose brain the breech-pin of a gun, three inches in length and three ounces in weight, was extracted twenty-five days after the receipt of the injury. The patient recovered perfectly. Dr. Dare remarked that such almost miraculous cases were of course rare exceptions to the rule, and that their only practical use was to teach the surgeon never to despair absolutely of a case, however desperate.

The indications in all cases of wounds of the cranial cavity, directly or indirectly implicating the brain, were—to remove foreign bodies, broken and depressed fragments of bone, or the ball, if superficial and easily accessible, and to keep down inflammation. Hernia cerebri had, perhaps, best be left to nature.

WOUNDS OF THE THORACIC CAVITY.

Wounds of this cavity derived their importance from the fact of its containing two vital organs, the lungs and the heart. What were the symptoms of a wound of the lung? Hæmoptysis was one of the most common, and was considered almost pathognomonic, but it was not universal. Some few cases had been treated at the National Hospital, in which air was respired for weeks through the external opening, but no blood came from the mouth. On the other hand, a man might spit up blood after being struck upon the chest by a spent ball coming in contact with the belt, or some solid body in the pocket, which prevented it from penetrating the thorax. If the opening was large and direct, air would probably be respired through the external opening. Emphysema was a reliable symptom of wound of the lung, but it did not usually result unless the opening was oblique or devious in its direction.

The degree of dyspnœa depended upon the size and directness of the external orifice, and upon the quantity of blood poured out into the pleuritic cavity or substance of the lungs.

The direction and course of the ball should be observed: if there were two orifices, the ball had probably passed straight through; if it had run around superficially, its course would probably be marked by a discolored line and tenderness along its track. The presence or absence of symptoms of collapse would assist the diagnosis.

The indications for treatment were—to arrest hæmorrhage; to prevent as far as possible the admission of air from without, and thus to avoid collapse of the lung; to moderate inflammation, and to support the patient during the stage of suppuration. The treatment was essentially different in simple punctured or incised wounds, from that in gunshot wounds of the lungs. In simple wounds, if there was not much hæmorrhage, the sooner and more exactly the external orifice was closed the better, in order to obviate, as far as possible, the danger of collapse of the lung, and to favor union by the first intention.

Guthrie advised that the patient should lie upon the injured side, in order to keep the surfaces of the wounded pleuræ together, that union might take place, and thus obviate the danger of emphysema and pneumothorax. If dangerous hæmorrhage existed, should it come from the intercostal artery, it should be ligated if possible; if from the substance of the lung and persisted, it might be necessary temporarily to close the wound, in order that the hæmorrhage might be arrested by coagulation.

In gunshot wounds of the chest, a compress might be applied to the external orifice until suppuration took place, then the wound should be covered very lightly, or left open. If a rib was fractured by the ball, the fragments should be removed, expanding the wound if necessary. The finger being used as a probe, all foreign bodies, pieces of cloth, or the ball, if superficial and could be felt, removed.

If acute traumatic pneumonia supervene, the treatment must be regulated by the constitution of the patient. A more enlightened pathology had discarded the enormous bleedings recommended and practised by Guthrie. It was generally found necessary to sustain the patient by nutritious diet, tonics, and stimulants.

If accumulation of pus or blood took place in the pleuritic cavity, compressing the lung and giving rise to dangerous dyspnœa, it should be let out. If the original wound is healed, it should be re-opened; if small, expanded; or, if not dependent, it might be necessary to make a counter-opening and keep it open.

The prognosis of a wound of the thoracic cavity, penetrating a vital organ, the lung, was always grave, but it was much less so in a simple punctured or incised wound where the external orifice might be immediately closed and there was a probability of union by the first intention, than in gunshot wounds where more or less sloughing in the track of the ball must inevitably result.

FOREIGN CORRESPONDENCE.

LETTER XXXVII.

By PROF. CHARLES A. LEE.

THE VENETIAN PROVINCES, POPULATION, BRIDGE, FORT PADUA, UNIVERSITY, BOTANIC GARDEN, MUSEUMS, OBSERVATORY, HOSPITALS, ETC.

PADUA, Oct. 20, 1862.

HAVING determined to visit the Venetian Provinces, including the celebrated *Quadrilateral*, taking the cities of Padua, Vicenza, Verona, Mantua, etc., on my route, I left Venice in the early morning train, and reached Padua in about one hour: distance twenty-seven miles.

Under the name of the Lombardo-Venetian Provinces are included all the Austrian possessions in Italy since the Treaties of Villafranca and Zurich. They embrace all the territory of the Republic of Venice, ceded to Austria by Napoleon I. by the Treaty of Campo Formio, and confirmed by the Treaty of Vienna; the possessions of the Dukes of Mantua east of the Mincio; the triangular space between the Lower Mincio and the Po, once a part of Lombardy; and some small possessions on the south of the Po, belonging to the Territory of Gonzaga, retained after the annexation of the Duchies of Parma and Modena, and of the Legation of Ferrara, to the North Italian Kingdom in 1860. The whole Austro-Italian Provinces include about 2,400,000 inhabitants.

Leaving my hotel, the *Albergo dell'Europa*, formerly the Giustiniani Palace, fronting the harbor, of which it commands a fine view, and near the Piazza de S. Marco, a gondola conveyed me rapidly to the railway station, which is at a considerable distance from most of the hotels. Here, having submitted to a stricter examination of luggage by the police than is usual outside of the Austrian dominions, we soon entered upon the long bridge which carries the railroad over the lagune, which took us six minutes in crossing. It consists of 222 circular arches of 32 feet 9¾ inches span; the thickness of the single piers is 3½ feet; the whole length 2 miles and 416 yards. It occupied four and a half years in erecting, and was completed in October, 1845. The height of the top of the parapet above the mean level of the water of the lagune, is 14 feet; its width 29¾ feet. In the centre is a large embankment called *Piazza Maggiore*, 446 feet in length, and 97 feet 10 inches in width. The depth of the water through which the bridge is carried, is from three to thirteen feet. The soil is entirely of mud. The foundation is upon piles driven into the bed of the lagune. The piers are of limestone, the arches and spandrels of birch, the cornice and parapet of Istrian stone. Close inside the parapet, on a level with the roadway, two channels are formed for carrying fresh water from the main land to Venice. In the foundations of this bridge, among other materials, 80,000 larch piles were used, and in the bridge itself 21,000,000 bricks, and 176,487 cubic feet of Istrian stone; and on an average one thousand men were employed daily. The cost was about one million of dollars.

About two miles from the lagune we reach the *Mestre Station*, where the railroad to Trieste branches off. But just before we come to it, we pass on the right the *Fort of Malghera* (now *Fort Hainau*), a very strong position, which underwent a long siege in 1849, when its fall led to the surrender of Venice, although a large Sardinian fleet was in its waters, and although the distance is more than 3,600 yards to the nearest part of the city, and only to be approached by boats or along the railroad bridge. The surrender of the city was effected by a novel expedient practised by the Austrians. They dismounted the 24-pounder siege guns, placed the muzzle of the gun against the parapet, and the breech sunk in the ground, giving the bore of the gun an elevation of about 45°, and thus without carriage or platform of any kind, obtained ranges of 5,774 yards with solid shot, and with the howitzer and hot shot of 4,634 yards, thus easily shelling the city. In military language, this fort is a double enceinte on a bastioned trace, of earthen ramparts and parapets, with wet ditches, and detached demilunes in advance of the curtains of the outer enceinte. In the gorge of the work are two extensive caserns, built by General Chasseloup of the French engineers. The position is exceedingly strong, surrounded as it is by low, wet, marshy ground, liable to overflow by gust tides, and exceedingly unfavorable for approaches, and still more for the camps of a besieging army. There are but three stations between Venice and Padua, and the whole country is flat and uninteresting. At one point on the way, the Alps of the Friuli and Carinthia are well seen, and several villas of the Venetian nobility are situated near the town of Dolo, on the banks of the Brenta.

Arriving at the Padua station, we encountered the usual crowd of carriages, calèches, omnibuses, runners, and baggage smashers, but working my way through the noisy crowd, I soon found myself quietly domiciled in "*La Stella d'Oro*," in the Piazza de Noli, in the centre of the town and close to the University.

Padua is said to be the oldest city in the north of Italy, and Virgil attributes its foundation to Antenor. It contains about 50,000 inhabitants. The houses are supported by long rows of arches. It is particularly celebrated for its University, and the Observatory connected with it. Montaigne, the essayist, took this city on his tour in Italy, in 1580, and describes it as "a considerable town, as large as Bordeaux, with narrow and ugly streets, with very few people about, and hardly any houses worth looking at, but prettily situated in a plain, over which it commands an extensive prospect," which description holds good to this hour. He describes the inns as not comparable to those of Germany for accommodation, which is also generally true; but that "the charges are one-third less," is very far from correct at present, according to my experience. The charges, however, at hotels, both in Italy, and everywhere else on the Continent, are high or low, according to the number of English who frequent them, and whether they are recommended in Murray's guide-book or not. An English physician of eminence, in London, advised me, if I wished to avoid high and extortionate charges, to carefully avoid all hotels of this class, and, though seldom followed, I found his advice very well worth heeding. As far as possible, however, I sought to avoid "Hotels d'Angleterre" and "Englischer Hafs."

The first place towards which I turned my steps in Padua was the University, or, as it was formerly called, "The

Studio" of Padua. This enjoyed a high reputation as far back as 1221, when Frederick II. commanded the students of Bologna to forsake that city, which had incurred his displeasure, and to resort to the city of Antenor. At first, it was more celebrated as a school of law, and among other great teachers boasted of the eminent Baldus, but afterwards took very high rank as a school of medicine. During the sixteenth and seventeenth centuries, its professors were among the most distinguished in Europe. Among these may be mentioned Vesalius, Fallopius, Fabricius ab Aquapendente, Spigelius, Sanctorius, and, in later times, the great Morgagni. The Venetians took great pride in this University, and extended to it special protection and encouragement. Perhaps, at this time, its medical department enjoys a higher reputation than any other in Italy. There are five faculties, theology, law, medicine, philosophy, and mathematics, and the chairs are all filled with very able men. Each faculty has a *Dean*, who is, generally, one of the senior professors. The *Senatus Academicus* consists of the Deans (*Direttores*) and the *Rettore Magnifico*, who is elected by the several faculties, and approved by the government. There are forty-six professorships, and the students generally number between 1500 and 2000. The public treasury contributes annually about two thousand dollars towards the general expenses.

There are several establishments in different parts of the town connected with the University, as four clinical schools for medicine, surgery, diseases of the eye, and midwifery; veterinary and agricultural schools, a botanic garden, and an astronomical observatory. The University Building or Palace is called *il Bo*, or *the Ox*, as it is said from the sign of the inn upon the site of which it stands. The building was erected at the expense of the Republic of Venice in 1493. The great hall or court, planned by Palladio, with the armorial bearings of the members entirely covering the halls, is very magnificent. At the top of the great staircase is the beautiful statue of Elena Lucrezia Comaro Piscopia, who died, unmarried, 1684, aged forty-eight years. She spoke Hebrew, Arabic, Greek, Latin, Spanish, and French, with fluency, was a good poetess, an excellent musician, wrote mathematical and astronomical dissertations, and received a doctor's degree from the university.

The Anatomical Theatre was built by *Fabricius ab Aquapendente* in 1594, replacing one still older; still it is the oldest in Europe, the design being by the celebrated Paul Sarpi. The obstetric hall contains an immense collection of models, wax preparations, and wet and dry specimens, and also a very large number of monstrosities of every kind. The Museum of Anatomy is one of the best in Europe, and the same may be said of the Cabinet of Natural History. This was first founded by Dallisnieri in 1734. The mineralogical and palæontological divisions are the most complete; the latter particularly so in fossils of the Veronese and Vicentine hills, especially in fossil fishes from Monte Balca. Among other articles I saw here a petrified human skull and femur; mammoth-sized ammonites; an extensive series of birds' eggs, from those of the humming-bird to the ostrich; a stuffed elephant who killed his keeper at Venice; and among the rest one of the vertebræ of Galileo, who was professor of mathematics here for upwards of ten years. This relic is said to have been purloined when his remains were removed, in 1757, to their present resting-place in the Church of Santa Croce at Florence. His bust, placed over the chair he once occupied, exhibits a very broad and high head, the forehead very prominent and capacious, with thick moustache and long beard. Here is still preserved much, if not all the apparatus, with which Galileo illustrated his lectures. The Theatre of Physics contains one of the largest collections of philosophical apparatus in the world; the room is nearly one hundred feet by fifty, and entirely filled. The *numismatic cabinet*, opening out of the cortile, contains many Roman and Greek bronzes, inscriptions, and coins, and a curious papyrus from Ravenna of the year 616, a deed of sale. I should have stated that there are busts and portraits of all the former professors, including Vesalius, Fabricius, Galileo, etc., down to the present time.

From the University I went to the *Spicola* or Astronomical Observatory, founded in 1767. It is situated in the mediæval town of S. Tomaso, the principal defence of Padua on the west side. It was erected by the tyrant Eccolino, and served as a prison, where many of his victims suffered. It is under the charge of Prof. Scaulini, who was absent on the Campagna, but I was shown everything by his able assistant. I found it supplied with the best of instruments from London, Munich, and Vienna. The equatorial is one of the finest in existence. The view from the top was magnificent, embracing the Campagna as far as the Adriatic, Venice, the Lagune, the entire range of the N. E. Alps, the Euganian Hills, etc., one of the most splendid panoramas. This establishment is, doubtless, one of the first in Europe, and does infinite honor to the city. Taking the Botanic Garden next on my way, I was very kindly taken in hand by the professor of this branch, who is also the conservator. He informed me that this was the oldest botanic garden in Europe, it having been established by the Venetian Senate in 1543. The celebrated Prosper Alpinus was professor of botany here in 1545. It is very extensive, and is situated near the churches of Il Santo and Sta. Giustina, and is laid out in the old formal Italian style. I was greatly interested in the garden, as it contains some of the oldest specimens of exotic trees and plants in Europe, the patriarchs of shrubberies, plantations, and conservatories. The magnolias are superb. The lebanon cedar, the oriental plane, and a *gleditchia* one hundred feet high, are among the most magnificent specimens on the grounds. Water is forced by a steam-engine over all the grounds, and supplies the fountains, etc., most abundantly from a river which runs through the city. Attached to the garden is a convenient and small fitted up lecture room and a botanic museum, with an extensive herbarium and a library of five thousand volumes with several manuscripts.

The *Bibliotheca Publica*, which belongs to the University, is situated some distance from it in the *Palazza del Capitanio*, formerly the palace of the Carruras. The printed books number over 100,000 volumes, and the manuscripts 1500. The immense hall containing the books is decorated with colossal frescoes of heroes and emperors, which were painted in 1540; among them is the portrait of Petrarch taken from life.

Having appropriated one day for visiting the hospitals of Padua, I set out very early in the morning for the *Spedale Civile*, in the street behind the University. Having sent in my card by the janitor I was soon waited on by one of the attending surgeons, who very obligingly took me over the entire establishment. The building is very extensive, having been erected on the site of a suppressed college of the Jesuits in 1795. It is of two stories and basement, built around an open court, between 300 and 400 feet on a side. It can easily accommodate 500 patients. Five of its wards belong to the University and constitute the clinical school, embracing fifty medical and twenty-five surgical cases. There were the usual divisions of male and female medical and surgical wards, also syphilitic, obstetric, and ophthalmic wards. There is also provision made in one division for cases of insanity; about one half the beds only were occupied. A few children, as is common in most Italian hospitals, were mixed in among the other patients, there being no children's hospitals. The wards were large, with very high ceilings and floors of polished breccia, which, on the first floor, was rough and much broken. At the end of each ward was a small altar, with an image of the Virgin and many pictures of saints, lighted candles, etc. It was the hour of the morning visit, and the attending physicians kindly invited me to accompany them in their rounds. I was struck with their very careful diagnosis and thorough investigation of every case. Their prescriptions, also, seemed very judicious. The physicians-in-chief are Doctors Bianchessi, Vandiani, Da Lu Ca, and Pellizzari. In passing through the wards it was almost impossible to distinguish the women from the men, and I was constantly confounding them. The females, from exposure to the sun and air, from constant occupation in agricultural labors, soon acquire masculine features and become prematurely old, grey, and wrinkled. The hospital was generally well ventilated and clean, except the insane wards, which were intolerably filthy, close, and unventilated. There seemed to be little or no classification. The nurses generally were females.

The hospital of *S. Giovanni di Dio* is under the management of the monks of that order, and receives but a limited number of acute medical and surgical cases. It seemed to be well managed. The Foundling Hospital is the oldest institution of the kind in Europe, having been founded in 1097. The annual admissions are about four hundred, and the deaths average fifteen per cent.

American Medical Times.

SATURDAY, JUNE 20, 1863.

CALOMEL AND TARTAR EMETIC IN THE ARMY.

The recent order of the Surgeon-General striking calomel and tartar emetic from the Supply List, has naturally excited a large amount of discussion and criticism in popular and professional circles. Quacks of every shade and complexion, from the infinitesimalist to the humblest dealer in roots and herbs, are exceedingly jubilant and profusely congratulatory. The old-school practitioner, who has to grapple daily with disease in all its multiplied forms, and solve the abstruse questions in therapeutics by actual experimentation, and who has come to give his faith to calomel and tartar emetic as his unfailing weapons in affections of great severity, fancies that a deadly blow has been aimed at his long tried and faithful allies. But students in the school of modern pathology and physiology look on with indifference, feeling that they have little or nothing at stake in the issue.

Thus far in the discussion of this order two questions have been raised:—1st, The propriety of the order, and, 2d, The propriety of removing from the Supply Table the articles referred to. The consideration of these two propositions evidently covers the whole ground. Let us examine them in detail.

It will not be denied that it is the duty of the Surgeon-General to regulate the Medical Supply Table. Annually, or oftener if necessary, the list of remedial agents to be employed by the Medical Staff must be revised, and such remedies added or stricken from it as the service may seem to demand. And the aggregate quantity to be used within a given time for a given force is also prescribed. No one questions the necessity or propriety of this revision of the Supply Table. It has never yet been alleged that in the discharge of this duty the Surgeon-General was impertinently interfering with the practice of the Medical Staff. Nor until now did it ever occur to any one that by this act the Surgeon-General reflected upon the professional qualifications of the surgeons of the army. On the contrary, the army surgeon has always been gratified at the revision of the table, for it seldom happened that new and important remedies were not added, and old and obsolete compounds stricken off.

The reason given in the order for striking calomel from the Supply Table is its abuse by military surgeons. The Surgeon-General states that he is officially informed that not only has profuse salivation been produced in innumerable cases, but that mercurial gangrene is of not infrequent occurrence. Finding it impossible to properly restrict the use of this powerful agent, he has ordered it stricken from the list of remedies furnished by the Department. He adds that he issues such an order with the more confidence, "as modern pathology has proved the impropriety of the use of mercury in very many of those diseases in which it was formerly unfailingly administered." That the Surgeon-General has presented sufficient reasons for his order no one not stubbornly wedded to antiquated ideas can deny. The correctness of his information in regard to the lamentable consequences following the abuse of calomel no one will doubt who has visited many military hospitals, and inquired particularly as to the practice. A certain class of physicians almost invariably employ calomel, and always administer it in cases of doubtful diagnosis; and they are not satisfied unless they produce its constitutional effects, believing that it is only under such circumstances that it is effectual. We have known of its exhibition in military hospitals to salivation in chronic diarrhœa, Bright's disease, chronic rheumatism, etc. But it may be said that in certain diseases it is acknowledged by all authorities to be useful, and is the army surgeon to be deprived of mercurials because certain persons abuse calomel? We answer, certainly not. There are still on the Supply Table several of the more eligible and useful preparations of mercury. There is the blue mass, mercury and chalk, bichloride, iodide, etc., all much more elegant than calomel, and far more likely to give the beneficial effects of mercury without the unfavorable results.

That modern pathology has very much limited the class of diseases to which mercurials have been considered especially applicable, is apparent on every page of our recent works on practical medicine and surgery. Within twenty years, from being one of the most frequently employed agents of the materia medica, it has come to take a very subordinate position. And it should be a cause of sincere congratulation with every practitioner that, with the advance of modern pathology, a remedy of so much power for evil, if injudiciously used, is gradually being supplanted, whether by a more correct knowledge of its therapeutical uses, or by more eligible and more intrinsically harmless agents. The same remark is true of tartar emetic. This article the Surgeon-General has also stricken from the Supply Table, "for the reason that diseases prevalent in the army may be treated as efficiently without tartar emetic as therewith."

After a careful review of this subject, with an extended observation among the military hospitals, and of inquiry among army surgeons, we are compelled to regard the order of the Surgeon-General as a judicious, and even a necessary measure. In the opinion of the best medical officers, in no other way could the evil have been successfully reached. Fully confirmed in this view, we must regard the harsh criticisms of the Surgeon-General by certain medical conservatives as exceedingly unwise and unjust. We believe that in this order, as in all his official acts, he has not only endeavored to advance the best interests of the army medical service, but equally to maintain the honor and dignity of the profession of which he is a distinguished member.

THE WEEK.

It is stated that charges have been preferred against Dr. Perley, Medical Inspector-General U.S.A., of issuing blank soldiers' discharges, for a consideration or otherwise, to persons not authorized to have them, and that the case has been placed before the Secretary of War for examination. This is not the first time that the Medical Inspector-General has had grave charges preferred against him. Several months back a Court-Martial was convened in his case to investigate certain charges, but when about to enter upon its duties it was dissolved by an order of the Secretary of War. Since that time the Medical Inspector-General has remained only nominally at the head of the Department of Medical Inspection. It is to be hoped that, in justice to Dr. Perley and for the good of the service, the Honorable Secretary will order a thorough investigation of these charges.

The Academy of Medicine has laid out a programme of scientific papers of unusual attraction. The plan of announcing papers a considerable period in advance is excellent, as it enables members to prepare for their discussion. It is due to this circumstance that the meetings have latterly been so well attended. There is, however, one source of disappointment, which might be easily remedied. It too frequently happens that the paper or discussion announced is delayed or passed over by the introduction of some new paper or business. This ought never to be allowed to occur. Members should never be disappointed in hearing the paper or discussion announced.

The Sanitary Commission held a meeting in this city during the past week. Its affairs are in a highly prosperous condition, and it is supplying the wants of the different armies of the United States with a prodigality and yet judicious discrimination of the various necessities of the soldier which commends it to the liberal support of the people. We have reason to believe that by the supply of fresh vegetables to many army corps, it has warded off impending attacks of scurvy. To show what is done in a single Department, the Western, we may state that, since the first of last January, 20,726 packages have been distributed, and those packages average at least a barrel's bulk each. The Commission is daily increasing its means of usefulness.

Reviews.

Physiological Memoirs, by William A. Hammond, M.D. Philadelphia, 1863.

The researches and views presented to the reader in these memoirs, are a reprint, and have appeared when the memoirs were originally published in the *American Journal of Medical Sciences.* The favorable reception of these *memoirs* at the time of their issue, bears elegant testimony to their merit. Rich in the results of experiments thoroughly and rigidly undertaken, they have contributed to establish a positive science. Each essay affords materials for a long and interesting study. Replete as are these valuable memoirs with facts, their interest would have been enhanced if the well founded conclusions arrived at from late physiological experiments had been incorporated by the author. We may instance the interesting facts established in regard to the physiological effects of alcohol, by Drs. Lallemand, Perrin, and Durry, as also other researches which have thrown new light upon the obscure question of urology. They would, perhaps, not essentially vary the results arrived at from Dr. H.'s investigations, but they would add somewhat to the completeness of his memoirs and to their influence.

Obstetrics: The Science and the Art. By Charles D. Meigs, M.D., lately Professor of Obstetrics, etc., in the Jefferson Medical College. Fourth Edition, revised and improved. With One Hundred and Twenty-nine Illustrations. Philadelphia: Blanchard & Lea. 1863, pp. 730

The works of Prof. Meigs have been well received by the profession, notwithstanding the faulty style of the author. The favorable position which he has long occupied as a teacher, and his fearless ex cathedra manner of enunciating views, often in direct opposition to the well settled convictions of contemporary authorities, have given great prominence to these publications. No one, however, can peruse such a work as the one before us without profit. It bears evidence of a close observation of nature, and, in spite of the arrogant style in which the author too frequently clothes his opinions, the reader cannot fail to draw useful and practical lessons from nearly every page. The third edition is revised and improved.

Chemistry. By William Thomas Brande, D.C.L., F.R.S.L. & E., of her Majesty's Mint; and Alfred Swaine Taylor, M.D., F.R.S., Fellow of the Royal College of Physicians of London, etc. Philadelphia: Blanchard & Lea, 1863.

This work is the joint production of two of the ablest chemists of England. It is designed to present in a compact form, and free from the verbiage which fills works on chemistry, all the leading facts of the science. Important as a general knowledge of chemistry is to the medical student, it is nevertheless true that he rarely acquires even the most superficial idea of its leading facts during his pupilage. The subject is dry, and its study tedious and irksome. This is due chiefly to uninteresting details, a faulty nomenclature, and cabalistic terms which the student must master. We have always been satisfied that chemistry might be made at once instructive and interesting to the medical student, and in the volume of Brande and Taylor we have a realization of this desirable object. The work is free from those useless terms and endless details, and the science of chemistry is unfolded to the student in a most attractive foam.

Correspondence.

REMOVAL OF CALOMEL AND TARTAR EMETIC FROM THE SUPPLY LIST.

[To the Editor of the American Medical Times.]

One of the principal reasons given by the Surgeon-General for removing calomel and tart. antimony from the Supply Table is, "that modern pathology has proved the impropriety of the use of mercury in very many of those diseases in which it was formerly unfailingly administered." Now, if this is so—and I do not deny the fact—then every intelligent surgeon should be in the possession of such facts, and should and would avoid the giving of mercury in such cases wherein it has thus been found to be useless or injurious. Therefore, then, assuming that the medical staff of the army are men of medium intelligence in their profession, this cannot be a good and sufficient reason for excluding not only mercury but tart. antimony from the supply table. The Surgeon-General does not say that these tabooed remedies are not remedial agents of acknowledged efficacy in certain diseases at all—his experience teaches him better—or that their place can be filled by any other agent or agents whatever, for his experience also teaches him that this cannot be done, but simply says these articles have been used in such a manner as to amount to abuse. I would ask the Surgeon-General, and the profession at large, if it is a good and sufficient reason that, because an article has been improperly used, henceforth it should not be used at all? If we admit this theory, we shall not only exclude mercury and antimony, but every important remedial agent in the materia medica. Who does not believe that alcoholic stimulants have been greatly abused, and that they have slain their thousands? Yet, who would deny them on this ground to the exhausted soldier dying from the shock of a wound? No rational man, surely. Who would refuse to use chloroform because it has been abused in incompetent hands? Why, on this ground, every blessing bestowed on us by a beneficent Providence would have to be thrown aside and rejected. If it is a fact, as this circular implies, that the army surgeons are incompetent to use articles of acknowledged efficacy, for humanity's sake discharge them at once, but do not tie up the hands of the intelligent surgeon, and compel him to look on and see his patient die, when the power to save him is within his reach. In cases of inflammation of the fibrous tissues, such as rheumatic pericarditis, endocarditis, peritonitis, sclerotitis, etc., an experience of thirty-five years tells me that mercurials and antimony, but especially mercury, will do more to save life than all other remedies combined. The alkalies will, it is true, do something to aid in this class of complaints, but mercury is the medicine par excellence. It stands at the head of the defibrinating remedies, and in such cases cannot be dispensed with. It is also equally useful in acute nephritis and some of the affections of the liver, to say nothing of syphilis. In rheumatic affections of the extremities we can wait for the action of alkalies, and in peritonitis we can use opium in large doses, but in acute inflammation of the heart, who would use opium or veratrum who understands his business, or who wait for the slow and uncertain action of alkalies? In such cases, as an adjunct, antimony is of great importance, and will do much, if properly used, to subdue disease and save life. If, as I have said before, your surgeons are not competent to fill the stations they occupy, then remove them, for, if they are not capable of using without abusing mercury and antimony, they certainly are not capable of using very many other remedial agents, or of being trusted to use medicines at all. If I were an army surgeon, I should consider such an order as a direct impeachment of my capabilities, and offer my resignation at once. Besides, this order is calculated to bring these two important medicines into great disrepute with the public, and give aid and comfort to our enemies, the quacks.

E. P. Bennett, M.D.

Danbury, Conn.

Army Medical Intelligence.

REMARKS

BEFORE THE AMERICAN MEDICAL ASSOCIATION

ON THE ORDER OF THE SURGEON-GENERAL.

By C. C. COX, M.D.,

SURGEON U.S.V.

I rise neither to defend nor oppose the propriety of excluding calomel from the Army. In a practice of many years' duration I have witnessed great abuses of this medicine in incompetent hands, while I am frank to say in other instances unequivocal benefit resulted from its judicious employment. But the order has been issued by the Surgeon-General for reasons, doubtless, sufficient, and I cannot allow misapprehension or misconstruction of his motives. However he may have erred (if err he did), it was a defect of judgment and not a fault of motive. No one has the interest of the profession more at heart than the Surgeon-General; no one has proved himself a more ardent devotee of the science; and the man does not exist who will dare, here or elsewhere, to deny his ability or challenge the purity of intention which marks his official conduct. He has diligently labored to eradicate charlatanism from the Army, and, by instituting many wholesome reforms and improvements, given a fresh impulse and a healthy tone to the department over which he presides.

Gentlemen have alluded to incompetent surgeons in the Army, and conclude the preferable method would have been to decapitate those who have so recklessly abused a valuable remedial agent, instead of excluding the drug itself. It is true that in a body for the most part composed of high-toned and skilful surgeons, there exist a few quacks who have no high appreciation of the art they practise. This is due chiefly to the loose manner in which surgeons, selected from personal considerations and not because of peculiar professional fitness for the place, are assigned by the Governors of some of the States to the charge of regiments. These cases are only to be reached by medical examining boards when cited before them upon charge of incompetency either by one or more of the officers or a medical director. Many of these cases have been already promptly disposed of, and others remain to be sifted. In numerous instances incompetent surgeons have been rejected by the boards, and immediately after dismissed the service. So that the Surgeon-General is not to be censured because in a day he does not strike down all incompetent surgeons of the vast corps over which he presides. This being a sheer impossibility, he preferred to exclude by order an agent which he had reason to believe, from reports of Inspectors and others, was most likely, of all the mercurials, to be abused, and which had really been injuriously applied in many instances.

Moreover, the proscription furnishes no ground for exultation to eclectic or other quack orders, as some imagine. It does not prohibit mercury *per se*, but only one form of it, most likely, in the judgment of the Surgeon-General, to be abused. Blue mass, hydrargyrum cum creta, corrosive sublimate, and the compound cathartic pill, are still embraced in the supply table for issue; and ipecacuanha is in many cases an excellent succedaneum for tartar emetic.

I am at a loss to comprehend the extreme sensitiveness of gentlemen upon this subject, or the severity of the denunciations of the Surgeon-General. The Army surgeons are those damaged by this order, if any, and the right to object is with them. Dr. Hammond has not invaded the walks of private practice; he has entered the forum of no man's conscience and challenged his right of opinion or practice. He has excluded calomel only from the medical corps of the Army over which he has jurisdiction, and in the exercise of an undoubted right should not be exposed to the protest of those who have not been assailed by the order. I trust gentlemen will, in their discussions, discriminate between the propriety of the order and the high character and unimpeachable motives of the distinguished chief of the medical bureau of the Army.

Headquarters, Department of the Northwest,
Milwaukie, Wis., June 9, 1863.

GENERAL ORDERS, No. 21.

Surgeon T. M. Getty, U.S.A., having reported for duty at these Headquarters, is announced as Medical Director for this Department, and will be obeyed and respected accordingly.

By command of Major-General Pope,
R. O. Selfridge,
Assistant Adjutant-General.

ORDERS, CHANGES, &c.

Acting Assistant-Surgeon W. T. Mendenball, U.S.A., has been tried by Court-Martial in the Department of the Cumberland, and sentenced for conduct prejudicial to military discipline to be dismissed the service.

Surgeon Wm. S. Wright, of the rebel army, having been found concealed in a house in St. Louis, Mo., with a rebel mail in his possession, and with large quantities of quinine, morphine, gold lace, etc., destined for rebel use, was tried as a spy by a General Court-Martial, and sentenced to be "shot to death." The sentence has been disapproved for want of jurisprudence by the Court-Martial, and Surgeon Wright is held in custody for trial by a Military Commission or such other disposition as the Commanding General of the Department may direct.

The Medical Director of the Department of the Ohio has been instructed to close General Hospitals Nos. 8 and 4, Evansville, Indiana, sending the patients to other hospitals in that town, and the Medical Officers and supplies to such places as may need them.

The Medical Director at Washington, D. C., has been instructed by the Surgeon-General to call on the surgeons-in-charge of the various General Hospitals in that city, to report without delay the probable amount of fresh vegetables, eggs, butter, poultry, fruit, etc., required by them daily per one hundred men, also their estimate of the average amount required by them daily. The Sanitary Commission propose to establish a market-car running between Philadelphia and Washington, and will supply hospitals with the above mentioned articles at cost price. At the present enormous, and, I believe, exorbitant rates asked for the various articles of farm and garden produce in the city it is found difficult to supply proper food to the inmates of the hospitals at the rate of commutation allowed by the Subsistence Department, and luxuries cannot be obtained at all. It is hoped that the plan adopted by the Sanitary Commission may accomplish something towards correcting the evil.

The Surgeon-General has ordered a Board to convene in Philadelphia, Pa., to consist of Surgeons W. S. King and R. Murray, U.S.A., and Surgeon P. B. Goddard, U.S.V., to examine such specimens of artificial arms, for disabled soldiers, as may be brought before it, and report on their merits, relative and positive.

Medical Inspector G. K. Johnson, U.S.A., has been granted fifteen days' leave of absence.

Assistant Surgeon F. G. H. Bradford, U.S.A., has been granted seven days' leave of absence.

Surgeons Frederick Seymour, at Nashville, Tenn., William Clendenin under treatment at same place, and S. M. Hamilton, on leave of absence, all of the Volunteer Medical Staff, have tendered their resignations on account of ill health.

Surgeon H. S. Hewit, U.S.V., arrived in Washington, D. C., on the 8th inst. He was Medical Director at headquarters in the field with Major-General Grant, remained in Jackson, Miss., in charge of the wounded after the fight at that place, was taken prisoner, and, on application to the rebel General Joe Jackson to be sent through the lines, as is customary in the case of Medical Officers, was placed in close arrest, sent to Richmond, and confined in the Libby Prison, from which he was relieved by lot on the 6th inst. He is now on leave of absence in New York city.

Surgeon-General Hammond has returned from his visit to Philadelphia, and resumed his duties in charge of the Medical Bureau of the War Department.

The following changes of Medical Officers in Washington, D. C., have been made recently.

Surgeon Henry Bryant, U.S.V., relieved in charge of Lincoln Hospital by Surgeon Gideon S. Palmer, U.S.V.

Acting Assistant-Surgeon W. A. Smith assigned to Columbian College Hospital.

Acting Assistant-Surgeons J. F. Thompson, A. Boothly, and E. W. Robertson to Armory Square Hospital.

Acting Assistant-Surgeon W. W. Bidlack to Emory Hospital.

Acting Assistant-Surgeons J. B. Pettijohn, T. Powell, and C. B. Webster, Surgeon A. T. Augusta (colored), U.S.C.T., Surgeon W. A. True, 25th Maine Vols., to Contraband Camp.

Acting Assistant-Surgeon J. S. Boyce, to General Hospital, Fairfax Seminary, Va.

Acting Assistant Surgeon Wiestling to report to Colonel L. C. Baker.

Assistant-Surgeon W. C. Buckley, 10th Pennsylvania Reserves, to General Hospital, Alexandria, Va.

Acting Assistant-Surgeon M. L. Baxter to Campbell Hospital.

Acting Assistant-Surgeon T. P. Secly, to 2d Division General Hospital, Alexandria.

Acting Assistant-Surgeon A. W. K. Andrews, and Assistant Surgeon H. R. Silliman, U.S.A., to St. Aloysius Hospital.

The Surgeon-General has directed that the work on the Sanitaria at Prairie du Chien and Fort Snelling, Minn., be abandoned, if not too far advanced, there being between 40,000 and 50,000 vacant beds in the General Hospitals.

Medical News.

Annual Meeting of the Rhode Island Medical Society.—The fifty-second annual meeting of the Rhode Island Medical Society was held in the Franklin Society's rooms, Wednesday morning, Dr. Henry E. Turner, of Newport, the President, in the chair. There was a fair attendance of members.

Dr. Geo. L. Collins presented the Treasurer's report, which was read and accepted.

The Librarian and Cabinet-Keeper of the Southern District presented a verbal report of affairs in his department.

Dr. C. W. Parsons, for the committee to name delegates to affiliated bodies, presented a verbal report.

Upon motion of Dr. U. Parsons, the subject of nominating delegates to other Societies was postponed to the semi-annual meeting in December next.

Upon motion, Dr. C. W. Parsons, the President, and Secretary, were authorized to issue credentials to such members as are desirous of visiting other societies.

Dr. S. A. Arnold presented the annual report of the Trustees of the Fiske Fund, which was accepted and placed on file. No award has been made for the dissertations presented during the past year. The Trustees offer $100 for the best dissertation on each of the following themes:—1. What evidence is there that inflammatory and febrile diseases have undergone any change of type? 2. Gunshot wounds, particularly those caused by newly invented missiles.

The Secretary presented obituary notices of members deceased during the year, including the names of Joseph Warren Fearing and J. James Ellis. The notices were referred to the Committee on Publication.

Dr. Ely presented the report of the Board of Censors, approving the application of Wm. H. Traver, of Providence, and Chas. G. Buttrick, of New Shoreham, to become Fellows of the Society, which report was accepted.

The Society then proceeded to ballot for officers for the ensuing year, with the following result:—

President—Henry E. Turner, of Newport.

Vice-Presidents—1. Jervis J. Smith, of Chepachet; 2. Otis Bullock, of Warren.

Recording Secretary—B. Lincoln Ray, of Providence.

Corresponding Secretary—Charles W. Parsons, of Providence.

Treasurer—J. W. C. Ely.

Librarian and Cabinet-Keeper, Northern District—Timothy Newell; *Southern District*—T. C. Dunn.

Board of Censors—David King, of Newport; Joseph Mauran, J. W. C. Ely, of Providence; J. H. Eldridge, of East Greenwich; Wm. A. Shaw, of Wickford; Sylvanus Clapp, of Pawtucket; Geo. W. Jenekes, of Woonsocket; Job Kenyon, of Coventry.

Registration Committee—Drs. Mauran, King, Bullock, Collins, Snow.

Committee on Publications—Drs. C. W. Parsons, I. Ray, and Ely.

Audit Committee—Drs. Baker and Collins.

Dinner Committee—Drs. Ely and B. L. Ray.

Drs. C. W. Parsons and Brown were constituted a committee to transfer the Treasurer's books and accounts.

Wm. H. Traver and James C. Buttrick were elected Fellows of the Society.

Dr. Mauran presented the report on Registration, which was read and accepted.

Dr. A. H. Dumont was announced as orator for the next annual meeting, and Dr. H. E. Turner as substitute.

An invitation was read from the Rhode Island Hospital to the members of this Society to attend the meeting of the Hospital Corporation this afternoon. The Society thereupon passed the following resolution:—

> *Resolved*, That this Society view with the deepest interest the successful progress of the movement for the formation of a Rhode Island Hospital; a movement which began with the medical profession of the city of Providence, but has now been enlarged to embrace the whole State within the scope of its beneficent operations; and we promise the corporators of the Hospital all the aid and influence which we can furnish in its behalf as physicians and citizens.

The Society then listened to an address of uncommon interest and usefulness from Dr. David King. The address was suggested by the recent occurrence of the semi-centennial anniversary of the founding of the Society. It included, besides its historical details, a philosophic account of the various influences which made the art of medicine what it was at the foundation of this Society, and of those causes which have affected the subsequent progress.

Hydrophobia.—Prof. Renault caused 131 dogs to be either bitten by mad dogs or inoculated with their saliva. Of these, 63 showed no symptoms during a period of four months, and were therefore considered free. Of the remaining 68, 31 became mad after the 40th day; 23 after the 45th; 16 after the 50th; 14 after the 55th, 12 after the 60th; 8 after the 65th; 7 after the 70th; 3 after the 80th; and one upon the 118th.—*Lancet.*

Original Lectures.

DISEASES OF THE RESPIRATORY ORGANS IN CHILDREN.

BEING A COURSE OF LECTURES PREPARED FOR DELIVERY DURING THE SPRING SESSION OF 1862 IN THE COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.

BY THE LATE

C. VAN ALEN ANDERSON, M.D.,

PHYSICIAN TO CHILDREN'S DEPARTMENT, DEMILT DISPENSARY, N. Y.

LECTURE II.—PART III.

CROUP—ITS PATHOLOGICAL ANATOMY, ETC.

The progress of croup is nearly always regular; it may be estimated by the description which I have given you, beginning with a preliminary stage, going on to one of development, and ending in the period of collapse. But towards the end of the second stage there may be one or more well marked remissions, when the efforts of coughing or vomiting eject large portions of the false membrane. The child then for a few hours enjoys tranquillity, until the morbid concretions are again exuded in the air passages, and dyspnœa once more begins. The *duration* of the disease cannot be accurately stated; it depends not only upon the intensity of the inflammation and the vitality of the child, but also upon the consecutive bronchitis, pneumonia, or other complications which frequently bring on its fatal termination. Dr. West has seen death occur in thirty-six hours from the appearance of the first symptoms. Prof. Gölis, of Vienna, mentions the case of a child who expired in fourteen hours; and Dr. Hamilton, on the other hand, has seen it last nine or ten days. It usually, however, runs its course in three, four, or five days; and from three to six days would include the greater number of cases.

The fundamental anatomical character exhibited on dissection of a patient that has perished from this disorder is the presence of a false membrane on the mucous surface of the larynx. It is of considerable consistence, of a whitish or yellowish color, and of varying thickness, lining the larynx, it may be the trachea, and sometimes even reaching down to the bronchi. Its external surface is smooth, the internal one which is applied to the mucous membrane is rough, and dotted over with numerous reddish points. In some cases it is of small extent, looking like little patches between which the inflamed membrane may be seen, and situated in different parts of the air tubes; in others it forms either half cylinders, or else complete casts of the parts, though such a full deposition of it is rare. It is usually thinner in the larynx, and those portions of it which are discovered in the bronchi are very friable. If there be no exudation of puriform matter beneath it, its adherence is remarkable, the mucous coat being often raised in an attempt to strip off the false membrane. Its chemical reactions are these—it is quite insoluble in both cold and warm water; sulphuric, nitric, and hydrochloric acids harden, shrivel, and coagulate it; liquid ammonia, acetic acid, and alkaline solutions in general dissolve and convert it into a diffluent mucus; it is therefore evidently albuminous in its nature.

The best theory that has been presented to account for this production of false membrane on a mucous surface, is that of Dr. C. I. B. Willard. He is disposed to refer the exudation of lymph to the inflammation affecting the submucous cellular tissue, and being at the same time diffused like the inflammation of erysipelas. The matter effused, he thinks, is thin enough to penetrate through the mucous membrane, and becomes concreted upon its surface. The delicacy of this structure in children facilitates the transudation in deep-seated inflammation, hence at an early age all such inflammations may cause the effusion of a fibrinous matter, as in croup.

Besides the presence of this abnormal formation, we behold in all cases evidences of inflammatory alteration of the mucous membrane. It is of a bright red color, particularly about the edges of the rima glottidis, the arytenoid cartilages, and sacculus laryngis, swollen, vascular, and easily peeled off. Occasionally there are patches of ecchymosis around the orifices of the mucous follicles, the mouths of which are frequently dilated. They give the membrane a dotted appearance, and they are larger in the direction of the longitudinal fibres of the trachea. The same swelling and vascularity which are distinguished in the larynx may also be found in the course of the trachea towards the primary division of the bronchi.

Although these are the principal morbid changes which you will observe, other post-mortem appearances will be found depending on the complications or the modifications of the disease. Thus the pharynx may have pseudo-membrane upon it, either disposed in patches or continuous with that found in the larynx, or, as in two cases given by Brétonneau, invading the œsophagus as far as the cardiac orifice of the stomach. Alterations of the stomach and bowels are never found; but the lungs present the most frequent evidences of disease. The bronchi are inflamed even when there is no false membrane in them; the mucous membrane is red and softened, or else it is much congested, and the tubes contain a muco-purulent or purulent secretion. In a large proportion of cases the lesions of pneumonia are found; in many an emphysematous condition of the pulmonary tissue, which has resulted from the asphyxia preceding death; and from the same cause the right side of the heart and the veins may be filled with blood.

From these foregoing observations and pathological appearances, then, we may rationally conclude that croup is an inflammation of the mucous membrane and of its cellular tissue, producing a characteristic albuminous discharge, concreted upon its surface by the effect of the temperature, the passage of air over it, and its own nature:—that there is always present a spasmodic action of the muscles of the larynx diminishing the calibre of the canal through which the air passes to the lungs—that a fatal issue is not always caused by the quantity of the false membrane; but that it is sometimes due to spasm, and the necessary results of interrupted respiration—and that when we are called to a case of croup we have to meet a most distressing and dangerous disease; one that in the majority of cases destroys life in spite of our utmost care and skill.

Croup may assume characters differing from those which I have given above, because one element of the disease may predominate over the others—in other words, we may have two modifications.

I. Croup with a preponderance of the inflammatory symptoms, prevails in robust children of a sanguine temperament. It is preceded by chilliness and rigors, is the severest form of the disease, is marked by continuity of the symptoms, the absence of remissions, hardness and rapidity of the pulse, great heat of skin, redness of the cheeks and lips, extremely difficult and forcible respiration, and if blood be drawn, by the buffy coat being found upon it. The disease may be confined either to the larynx or trachea; in the former case the respiration, voice, and cough all exhibit the strongest symptoms, the pain and swelling of the larynx are very noticeable, and convulsions sometimes come on, the attack terminating unfortunately even in so brief a time as twelve hours. If, however, the trachea only be implicated, the progress of the disorder is less rapid and fatal. The cough is not so brazen, the voice not so hoarse, the difficulty of respiration less, and the feeling of impending suffocation not so oppressive. There is violent fever present, and pain is usually felt along the course of the trachea, or a burning sensation in that region is complained of. The attack may be prolonged; twelve or fifteen days' treatment partially subdues it; but the patient is carried off in a relapse, or else the acute symptoms subside, and the malady assumes a decidedly chronic character.

II. Croup with a predominance of the nervous symptoms is far more manageable, provided it be taken early. The complaint may come on with the ordinary preliminary stage, or in other cases the patient may be suddenly attacked with brassy cough, hoarseness, and dyspnœa. There is always fever present, though it is not so intense as in the last modification; but the distress of the child is quite as great. The nocturnal exacerbations and daily remissions in this form will strongly attract your notice; but by prompt treatment I believe you may sometimes relieve the spasm and mitigate the inflammation before the false membrane has time to form. Some of you who are in the habit of observing the practice of the Demilt Dispensary, will, I am sure, remember the case of a little boy three years old who was brought there last December, suffering with the usual symptoms of this disease. He had been seized about five hours before he came under our observation, with the brassy cough and dyspnœa—his skin was very hot and dry, and his pulse was 156; there was also some lividity about the lips, and his general condition gave us very slight reason to suppose that we could check the progress of the disease—indeed, we were forced to consider the early performance of tracheotomy as the only possible chance of saving his life. Active treatment was immediately begun, and after five days, during which the difficulty of respiration slowly increased, I had the satisfaction of seeing the dangerous symptoms yield, and the child begin to recover without an operation.

Croup may be complicated with other diseases, or may be itself secondary to them. Of those which complicate it, you will have gathered from what has been already said, that affections of the bronchi, and of the structure of the lungs—in other words, bronchitis and pneumonia—are oftenest met with. Bronchitis is found in young and delicate children, and is associated with catarrhal symptoms. Though the signs of croup are all present, those of bronchitis are added to them; thus there is more wheezing in the chest, more expectoration, and dry and moist râles are heard usually in both lungs. Both affections combined are of course more dangerous than either taken singly; though the croup may yield to the inflammation of the bronchial tubes, or on the other hand the bronchitis may disappear before the laryngeal trouble. But it generally develops into the commonest and most dangerous complication of croup and pneumonia, fearfully increasing the peril of the preceding malady. This does not occur in the early stage, but happens towards its termination. Its detection is not always easy, for it may be confined to a small portion of the lungs instead of being general, and the loudness of the croupy sound over the whole thorax may greatly interfere with our auscultation. Its access is announced by an increase of fever, and a more rapid sinking of the vital powers; but we should not wait for these signs, a competent physician will take pains to make himself thoroughly acquainted with the condition of his patient's lungs every day.

Croup is sometimes observed in connexion with hooping cough, phthisis, measles, small-pox, scarlatina, and diphtheria. Mr. O'Ferrall met with two cases of its occurrence in the epidemic of scarlet fever which prevailed in Dublin in 1834. "Croup occurred," says he, "in two instances, in which, notwithstanding the opinion of Mons. Trousseau, I could not doubt its origin in scarlatina . . . . One child who recovered ejected the false membrane (which I still preserve) in a tubular form and presenting a cast of the trachea a little beyond its bifurcation. In a child who died, patches of false membrane were also ejected; but she sank exhausted, and the disease was afterwards discovered to have extended far into the bronchial ramifications."[*] Croup complicating scarlet fever makes its inroad about the time of the appearance of the eruption, or soon after.

At our next meeting, gentlemen, I propose to consider the diphtheritic form of croup; the diagnosis of it particularly from Laryngismus Stridulus or False Croup; its prognosis and treatment; and then, with your permission, to commence the study of pertussis or hooping-cough.

Original Communications.

REMARKS ON AMPUTATIONS.

By DEWITT C. PETERS, Asst. Surg. U.S.A.

Mr. Skey, in his instructive work on operative surgery, uses the following impressive language:

"Amputation is the last resource of the surgeon—at once the shelter and confession of the incompetency of surgical art. The knowledge and skill of the surgeon fail to cure a disease, and he is reduced to the necessity of removing the entire portion of the body of which it forms a part. If such a disease prove incurable in his hands, he is justified, in obedience to an imperative law of nature, which dictates the desire of prolonged life, in removing it, with a view to preserve the mutilated relic. There is no operation in the whole range of surgery compared to that of amputation, that should claim the previous exercise of an equal amount of skill, of patience, or the decision on which demands so large an amount of conscientiousness. The most experienced are yet but students."

The era of promiscuous surgery both in military and civil life, has passed nearly, if not quite, into oblivion. It is with pleasure we read and witness the rise of our science in common with its kindred associations in the arts, until the present half century is reached, when we find it resting on a sound basis, and supported by established laws and precedents. The surgeon of to-day who would thoughtlessly or recklessly sacrifice a limb in preference to making the exertion to save it, does so at the peril of his professional reputation. He meets the condemnation of his fellows, and renders himself amenable to the laws of the land. The exigencies of the battle-field no longer shield ignorance or rashness, and it must only be viewed in the one light of being the chosen spot where we are to exercise our highest endowments, keen judgment, skill, and discrimination, in saving both life and limb. In the trying emergency when the army surgeon is surrounded in countless numbers by his wounded fellow-beings, he wields a power for good or evil unknown to any other calling. Suspended on his efforts are the great issues of prolonging and saving life, and, lastly, that of preventing deformity, and hastening recovery. Surely, then, he should be master of his position, and feel confidence in his abilities to accomplish the most good with the least means.

The question of the preference or advantage of primary over secondary amputations in certain cases resulting from gunshot wounds, notwithstanding the statistical evidence of a list of surgeons headed by Mr. Guthrie, is, and probably will be for a long time to come, open for discussion. The theory of John Hunter that "amputation is a violence superadded to the injury, and therefore heightens the danger," continues to have its followers, and seemingly it is not wanting in a degree of plausibility. In this instance, however, like unto several disputed points in our science, rarely the truth lies in an excessive faith for either side, but rather in choosing for our guidance a middle and safer course. There are circumstances encountered in a variety of cases met with on the field, which in their investigation cause a deviation from any rule established upon incomplete statistics, or else the surgeon sinks to the rank of a mere routine operator. It was the early practice of military surgeons to resort to primary amputations indiscriminately, and it was then the easiest and best mode of relieving the wounded. The treatment of wounds and fractures was not so well understood by these ancients as by ourselves, and, lacking army hospitals, the wounded were thrown upon the communities where they chanced to be, and it is to be supposed they received very little surgical care. In his unparalleled military experience, Larrey, no doubt, had his attention drawn to the fatal results following this general system of amputating, for on one occasion, after a great battle, he is reported to have dressed compound fractures of the leg with sheaves of grain, there being no other and better material to use as splints at his command. The fact is stated that towards the close of his career he was more cautious in resorting to the knife than he had previously been. The existing war in our own country is doing much to elevate conservative surgery, and in no one particular point more than in deterring army surgeons from amputating without first seeking consultation. The conservative course instituted by these surgeons has been materially aided by the grand system of General Hospitals, which, like magic, have sprung up in our midst. Their number, capacity, and perfectness in detail, are at the same time the wonder and the pride of the nation. To the wounded soldier they are asylums where his flagging energies are revived, his hopes restored, and his wounds cured. They may be justly styled the spinal column to the army, and from sickness and injury they have stayed its decimation.

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[*] Graves's Clin. Med., vol. i., p. 321.

It is well authenticated in surgery that there is a material difference in the results following amputations performed on the battle-field, and the same operations performed in well organized civil and military hospitals. The operations may be executed with equal care and skill, yet on the field, under this severe surgical interference, the patient is prone to die. The reason is obvious, and is readily accounted for in examining the subject. A soldier after long and fatiguing marches, deprived of his rest, submitting quietly to irregularities in his diet, is suddenly ushered into a state involving great mental excitement; he over-exerts himself in the performance of his duty, and finally, struck down by a bullet, falls bleeding, and perchance badly wounded. The condition of such a person, when seen by his surgeon, is far from being desirable, nor can it be equal to the increased shock which amputation implies; therefore succeeding the operation, reaction frequently cannot be established, and he must and does succumb. If, on the other hand, the reaction is slow, yet certain, the difference is only slightly in the patient's favor. He lacks the solid comforts and the coveted auxiliaries with which our General Hospitals abound, and he must be transported to receive them. The movements of a large army in a field of active operations require it to be relieved of its sick and wounded, and to a limited amount only can the supplies needed by them be conveyed. In consequence of these tangible reasons the indications in the treatment of recent amputations on the battle-field are violated in two very important points, viz. the parts are deprived of their natural rest and quietness. The sequel following the disturbing the patient at this period is, that he may live to reach a General Hospital with his vital powers nearly extinguished, or his strength so reduced that he is a fair subject to contract gangrene or any complication tending to lessen the chances of recovery. In the present undecided state of our experience, we are unable to determine whether many of our patients could more advantageously bear the transfer to a General Hospital in the first instance, and undergo the operation of amputation subsequently, or *vice versâ*. These remarks are intended to apply directly to cases of gunshot wounds of the lower extremities, although their import reaches, to a certain degree, similar wounds of the upper extremities. The latter, however, are less dangerous to the patient, are followed by a weaker shock to the nervous system, and are considered by surgeons far more favorable for primary amputation than the former. In this connexion it may be proper to call attention to the peculiarities noted in the constitution of some men to bear injuries, loss of blood, and severe surgical operations, better than the majority of their comrades. The same anomalous power is possessed by a few persons, when injured, to retain their strength under transportation from one point to another. In the spring of the year 1855, while serving in the Rocky Mountains against hostile bands of Utah and Apache Indians, I had charge of a soldier who had been badly wounded in the right knee-joint. By the force of uncontrollable circumstances I was not, at the time the injury was received, allowed to amputate. He was transported in a litter, supported and carried by two mules over a rough trail for the sixteen succeeding days. His equilibrium was not in the least disturbed by the journey, and on reaching our fort I placed the man under an anæsthetic, amputated his thigh, and had the satisfaction of witnessing his rapid recovery.

The mode of amputating, and the steps to be taken at each place of election, are matters clearly detailed by our text-books on surgery, and need not here be minutely recapitulated. The opinions of eminent surgeons, however, are at variance somewhat as to the exact shape of the flaps to be made in amputating, and also as to the manner of making them. The rule laid down, and practised by many skilful operators, is to make double flaps when there is beneath a single bone (like the femur), and when there happen to be two parallel bones (like the tibia and fibula), to employ the circular operation. There is still a class of surgeons who give preference to flap operations in amputations wherever they can judiciously use them. The procedure of transfixing a limb and cutting outwards in forming flaps, has its warm advocates; and, on the other hand (especially in certain localities), the steps of the operation are reversed by the surgeons making their incisions from without inwards.

The French surgeons have modified the old circular operation by dividing in respect to layers (that they may fully retract), the integument and the muscles, each separately. They claim thereby that fewer ligatures are needed, for the vessels are severed transversely and not obliquely, as happens in the flap operation. The choice of the operation itself, or the mode of performing it, is usually the effect of education and habit. Accordingly, each varies in individual hands, and has its own peculiar merits. The highest aim of the surgeon should be to save as much of the injured parts as he consistently can, and still give his patient a useful stump. In order to accomplish this important object, it may become necessary to combine the steps of two operations, and in these special cases the ingenuity of the operator may be fully taxed. If he pays due regard to the relative anatomy of the locality, and is governed by sound surgical laws, success will surely crown his efforts.

It is not my province, in these remarks, to advocate the recommendation of any one operation over another in a particular section, nor do I believe such a course productive of benefit. The respective operations of Hey, Chopart, Syme, and Pirogoff, are to be put in practice when by the nature of the injury they are specially indicated. The most objectionable among these plans is the procedure demonstrated by Pirogoff, which in the hands of surgeons in this country has not proved propitious to its general adoption. In amputating the leg, a slight diversity of opinion still exists on the propriety of choosing between what was known in olden times as the "rich and poor man's stump."

In selecting the point at a hand's breadth below the knee-joint to operate, we secure sufficient material for a cushion to the stump, and to which a most useful and symmetrical artificial limb can be adjusted. The place of election being the lower third of the leg, where the soft parts are scanty, we gain a poor covering for the bones, and run the risk of having the cicatrix continually ulcerated by pressure. The theory of preserving as much of the limb as possible for the sake of beauty, has long since exploded, the mechanic having substituted an artificial leg, which, when covered by clothing, is fully equal in appearance to the natural limb. The long stump is again objectionable, on the ground that it lacks strength when compared to the "poor man's stump."

The operation of amputation at the knee-joint is not practised by surgeons of the present day so commonly as in earlier times. The operation is selected when amputation of the leg is not admissible. The mode of operating in this locality is either to form a single flap from the posterior part of the leg, or else the circular procedure is employed. In either case the ends of the condyles of the femur are sliced off, the vessels are secured, and the flaps are brought in apposition. For practical purposes the stump thus formed cannot be excelled, but the danger to the patient is enhanced by exposing and disturbing the sensitive structures composing this great joint. The constitutional troubles generally arising from the operation under consideration are of the most serious character, and not unfrequently terminate speedily the patient's existence.

The majority of our most eminent surgeons prefer the flap operation in amputating the thigh, and to the observer it is certainly one of the most satisfactory operations in surgery. The character of the injury or the effects of disease may, however, be impassable barriers against the use of this single mode of operating in all instances. In these exceptionable cases we are to be governed entirely by the surrounding circumstances in making the flaps, and, above all, we are to take care and not include unsound tissues in the newly formed stump. The selecting of the place to amputate the thigh may be followed by mighty consequences, for it is well known that the nearer the hip-joint the limb is removed, the greater is the danger, and, in a minor degree, the same may be said in approaching the knee-joint. The practice of always amputating a contused and mangled limb (as recommended by a late writer) because it is "a constant source of accumulating irritation," is a bad precedent to establish, it being at variance with our experience and also with conservative surgery. The great dangers to be apprehended and guarded against in amputating the thigh are those arising from the shock and constitutional irritation; locally, we may have secondary hæmorrhage, pressure, and ulceration, caused by the remaining portion of the femur (when the flaps are scanty, and the stump is not properly supported, the free end of the bone is prone to tilt upwards). Exfoliation of the sawn extremity of the remaining fragment, and, lastly, extensive inflammation and sloughing, may be a source of annoyance, and arrest the recovery of the patient.

In discussing the important subject of compound fractures of the thigh, too little stress has hitherto been paid by surgical writers to the saving of limbs. Following the teachings of Dupuytren, Baudens, Hennen, Guthrie, and a host of others, we are too ready to admit that amputation is our sole reliance. They would have us believe that the patients who save their limbs remain ever afterwards martyrs to a miserable existence; that for years fistulous openings, necrosed bone, shortening of the limb, gleety sores, and shattered health, torment the sufferer, and finally end his career. Others inform us amputation of the thigh is a dangerous expedient, and in their hands has resulted, in the majority of cases, fatally, yet they carefully avoid entering into any details of their manner of treating these fractures. The wonder to my mind is, that their patients ever recovered when laboring under this species of injury, for in both England and France, according to my observation, they are sadly deficient in the modern mechanical appliances necessary to treat these fractures successfully. The surgeons of America are peculiarly expert in the treatment of fractures of the thigh, which, after much study to fully comprehend, they have reduced to a science. They are not, therefore, to be deterred in their progress by worn-out theories, or the dread of encountering necrosed bone and its usual train of troublesome symptoms. If the case is pronounced favorable for preserving the limb, it is submitted to a judicious system of treatment in some General Hospital. The removal of the patient now becomes the object demanding our earnest attention, for at this early period of the injury, by negligence or carelessness, the condition of the sufferer can be rendered hazardous. The indications are, to place the parts in a natural position, keep them immovable, and dispense with snug bandages and splints. In addition to the common field-litter, I would recommend that one or two double inclined planes be furnished to the surgeon of each regiment. The double inclined plane should be similar to the pattern constantly used in our large civil hospitals, where we commonly meet with these injuries. The apparatus is so constructed that it will rest securely on the litter, and can easily be changed to either side, and thus made to accommodate itself to the fractured limb. It can be firmly secured to the litter by straps and buckles, or can be fastened by strips of bandage. The advantage gained by the use of this apparatus is, that it prevents the disturbing of the patient unnecessarily, and, also, it gives us free access to the wounds on applying fresh dressings, and when not in service it can easily be transported. The treatment of recent stumps is of far more importance than the mere steps of the operation, which can be readily learned and carried into execution. The former requires patience, experience, and skilful manipulation. It may be said with truth that on these details, more than the skill exemplified in operating, depends the patient's life. Before closing the flaps of the stump, be sure the hæmorrhage has ceased. If it is general from the fresh cut surface, it is prudent to leave the parts exposed to the air for a time, or bathe them with cold ice-water. Should the bleeding be continuous and flow from the cancellated structure of the bone, it can be arrested by a plug of beeswax or wood without injury. The dressings to be used should be light and secure, yet care must be taken to loosen them on the advent of inflammation and swelling. The great danger being from secondary hæmorrhage, we should avoid stretching the ligatures until a sufficient time has elapsed for them to become detached. In removing the adhesive straps they should first be loosened by bathing the parts with tepid water, and then with the forceps they should be seized and drawn towards the uniting wounds; an opposite course would tend to break down recent adhesions. Finally, in the treatment of the general and local symptoms as they arise in these cases, it remains for the surgeon to exercise his judgment to the best advantage of his patient.

EPILEPSY TREATED WITH IODIDE OF LEAD.

By W. W. ELY, M.D.,

OF ROCHESTER, N.Y.

Practically considered, epilepsy presents two classes of cases—the curable and the incurable. Inveterate habit and certain pathological changes must ever render many cases of this formidable disease unmanageable. The curable class has been treated with some success by regimen, and by certain minerals and vegetable narcotics, without, however, establishing the reputation of any particular method or agent as decidedly anti-epileptic. The preparations of *lead* have not as yet had an extended trial in this disease; yet, from the peculiar and decided influence of this mineral on the nervous system, it is not unreasonable to suppose that it might prove of benefit. The only notice I have seen relating to the use of lead in epilepsy, is a statement by the late Prof. William Tully (*Mat. Med. and Therap.*, vol. i., p. 735), that he had known several cases of epilepsy successfully treated by the uniprotacetate of lead. He also suggests, from theoretical considerations, that the protocarbonate might prove more speedy and effectual, and adds that he has never verified this belief by actual trial.

The prompt and beneficial influence of the iodide of lead in two cases in which I have recently employed it, has led me to hope that it will be found on further trial worthy of the confidence of the profession in the treatment of this formidable disease. I may add, that the remedy in question was selected as a matter of convenience and without refer ence to the supposed effect of the iodide. Yet I am satisfied that it is an eligible way of administering lead for its specific effects; and if any importance is attached to the *humoral* notions somewhat prevalent in regard to epilepsy, no objection, at least, can be urged against these two articles in combination.

G. B., a twin boy, born Oct., 1854, had a severe convulsion in July, 1861, another in December, and a third on May 2, 1862. From the latter date the attacks were manifestly epileptic, occurring generally at night, and *every* night, averaging five or six daily, until the following December. He was treated with a variety of remedies in addition to regimen, viz. mercurial cathartics and vermifuges, oxide of zinc, belladonna, quinia, iodide of potassium, a seton in the neck, etc. A paralysis of one side of the face suggested the probability of cerebral disease. After nearly all hope of benefiting him had been abandoned, and he had become almost a lunatic, I prescribed, Nov. 27, 1862, five grains of acetate of lead, three times a day, in an emulsion of castor oil. After a short time the medicine was discontinued on account of the obstinate constipation it induced. I then gave him the iodide of lead, two grains three times a day, and continued it until it caused severe enteralgia. After the occurrence of this symptom, in the latter part of December, his fits ceased, and have not returned. His mind is restored, and his general health is now good.

A son of Mr. W., aged 15, began to have convulsions at about three years of age. Up to his fifth year they were infrequent, and attributable to some exciting cause. From the seventh to the twelfth year they were more common, but consisted of slight spasms only. For the last three years they have been strongly epileptic every three or four weeks, numbering from ten to thirty at each period. In addition to dieting and palliative remedies, he took the oxide of zinc, thirty grains daily, for about three months, without the least apparent benefit. He then used twelve bottles of Pierlot's valerianate of ammonia, which proved only a palliative. For three or four months he took the ammoniuret of copper, with a similar result. In March last he commenced the use of the iodide of lead, five grains daily. About two weeks afterwards he had one fit and two slight spasms. The remedy was continued, increasing it to nine grains daily, until it produced severe enteralgia, when it was omitted. He has now passed over the usual periods without any attack of the disease, and appears to be improved in every respect. The effect of the medicine has been to moderate his appetite, which was formerly difficult to control. It has also reduced his weight from 138 to 124 pounds.

If any one should be induced, from this limited experience with lead, to make trial of it in epilepsy, I would suggest that the remedy be given until its specific effect on the bowels is obtained, and that the enteralgia be treated palliatively, *without opiates*, or be allowed to take its own course. The proper regimen should be enjoined on the patient. A stimulating diet, over-exertion, and mental excitements, prove prejudicial in many if not all cases of epilepsy.

June 13, 1863.

POSTURAL TREATMENT OF LABORS

WITH PROLAPSE OF THE UMBILICAL CORD.

By JOSEPH MARTIN, M.D.

OF NEW YORK.

Having on two other occasions occupied the pages of the Medical Times with the history of cases that illustrated Dr. T. G. Thomas's method of treating labors with prolapse of the umbilical cord, it is with some reluctance that I again bring the subject before the profession. But in looking over Professor G. S. Bedford's "Principles and Practice of Obstetrics," I find that the peculiar method of treating this complication, called by Dr. Thomas the postural treatment, has been merely alluded to in a note, as if it were an untried practice. As might have been expected, from the well known ability of the writer, this treatise on midwifery has become a favorite text-book in the medical schools of this country. And as the life of the infant in such labors is always endangered and often sacrificed by the use of the forceps, as recommended by the above author, or by version, the favorite practice of other writers, while a large number of cases on record show that by the postural treatment, when properly managed, *the child is uniformly saved*, it would serve the cause of humanity if physicians who adopt the last mentioned method would publish every case that comes under their care.

A few days ago I was called to attend Mrs. M——, aged 29 years, in labor with her seventh child. She had experienced, before I saw her, moderate labor pains for several hours. The vertex presented at the superior strait, the head was in the left occipito-anterior position, and the os uteri open to the size of a dollar. As the head was not engaged in the pelvis no other examination was made for one hour, when the os was found fully dilated, and the membranous bag was distended, during pains, by an unusual amount of liquor amnii. The labor pains being now strong and frequent, and the head not entirely engaged, I waited a few minutes longer, when the waters were suddenly discharged; and immediately after the finger detected a large loop of the umbilical cord, which had slipped down on the left side of the child's head, near the right sacro-iliac synchondrosis.

I then explained to the patient and her family the nature of the difficulty, the necessity of removing it to save the life of the child, and the manner in which the operation would have to be performed. No objection was made to a change of position; and, after holding the cord between the two fingers, for the double purpose of preventing its further descent and observing its pulsations, until labor pains had forced the head as far into the cavity of the pelvis as could be permitted with safety to the child, the woman was placed in the position recommended by Dr. Thomas—that is, upon her knees, with her face and shoulders down upon the pillow. The left knee was brought close to the edge of the bed. And, as I stood by her side, the left hand was passed under the fundus of the uterus to support it and its contents during and in the absence of pains. The four fingers of the right hand were then introduced into the vagina, and an attempt was made to carry the prolapsed cord far enough down towards the pelvic opening to cause it to slip by its own gravity into the body of the uterus, but without success. The thumb was now introduced, and the whole hand was passed along the left side of the head, carrying downwards the cord until its coils could be felt as they lay upon the breast of the infant. At the same time the little finger rested upon the ear, and the backs of the fingers were pressed against the brim of the pelvis, at the right sacro-iliac synchondrosis. The hand was slowly withdrawn as the labor pains forced the head farther into the pelvis. The patient was then turned upon her back, and in less than half an hour the child was born alive, as if there had been no complication.

I will leave it to the reader to decide whether the postural treatment, as illustrated by this case, is preferable or not to turning, and the use of instruments.

The Congrès Scientifique of France will this year hold its session at Chambèry, from the 10th to the 20th of August. The programme of medical questions is as follows:—*Cretinism:* What is the use of hospitals for cretins? *Cemeteries:* Has experience shown that any influence has been produced as regards epidemics, etc., through the neighborhood of cemeteries? *Marshes:* Do the Marshes of Savoy produce pathogenic effects, etc.? *Medical Education:* Is medical science advanced in France by the multiplication of centres of instruction? *General Hydrology. Special Hydrology. Judicial Payments to Medical Experts, etc.—Brit. Med. Jour.*

Reports of Societies.

NEW YORK COUNTY MEDICAL SOCIETY.

STATED MEETING, May 4, 1863.

ALFRED UNDERHILL, M.D., PRESIDENT, IN THE CHAIR.

STIMULANTS IN TYPHOID FEVER.

Dr. T. C. Finnell opened the evening discussion on the treatment of typhoid and typhus fevers by inquiring—At what period of the disease in question the use of stimulants should be commenced? In his opinion this use was indicated at an early period of the malady. Some were in the habit of deferring them until nervous tremors manifested themselves, the tongue beginning to get dry and brown, and delirium and a quick pulse were ushered in. But he wished to know what were the real indications for their use?

Dr. Jos. Wooster stated in reply that he was in the habit of giving stimulants very early in this disease, indeed as soon as the hepatic and other functional derangements shall have been corrected. All the varieties of typhoid and typhus fevers he considers to be the result of various sedative poisons diminishing the energies of the heart; thus requiring the antagonistic influence of stimulants in proportion to the various grades of depression.

Dr. Downs advocated an early use of stimulants.

Dr. Thoms stated that he was one of the out-door visiting physicians to the New York Dispensary. His district was bounded by Broadway, Spring, Delancey, Allen, Division, Bayard, and White streets. Within this district may be found some of the filthiest locations on Manhattan island. Dr. T. referred to cases of typhoid fever occurring in Nos. 214 and 216 Canal street, Nos. 77, 79, 81, 90, 106, 109, 113, 115, 132, 167, 172, and 188 Mulberry street, Nos. 90, 92, and 94 Baxter street, and Nos. 78, 106, and 195 Mott street, with a number of other cases scattered through the various streets of his district, and mentioned as a remarkable fact that nearly all of the cases he has atttended dwelt in rear buildings.

Dr. T. has seen whole families pass through the disease, and every inmate in whole buildings infected by it. The rear house No. 108 Mulberry street has not been free from typhoid fever for over one year.

He finds that his cases have as good a chance to recover without stimulants (for want of means) as hospital cases have with them. Uses quinine in small doses freely, as a substitute, and when he does use alcoholic stimulants gives Bourbon whiskey the preference.

Dr. T. recommended that the profession would urge the importance of removing typhoid fever and similar patients, upon the authorities.

Reference was made to a number of cases of variola where the city physician, the health warden, and city inspector, had been informed of the same, but the only notice taken of the cases was a mere visit by the health warden of the district.

Dr. Chas. Henschel remarked that many cases require no treatment at all. It is only in the graver forms that we are obliged to act energetically, and then stimulation is our sheet-anchor; but that anchor may be dropped too soon—when we once have begun with stimulants, we are obliged to go on and to increase them in quality and quantity. It is therefore safer, when we are in doubt whether the proper period for stimulation has arrived or not, to wait six or twelve hours, and then begin with the mildest—valerian, serpentaria, wine whey; or where there is a disposition to diarrhœa, brandy, if good, otherwise whiskey. Where little or no diarrhœa exists, with great pain in the abdomen, which is tympanitic and excessively sensitive to touch, frequent vomiting, and great thirst, ten grain doses of calomel once or twice repeated, rarely fail to give relief. In extreme cases Dr. H. has given phosphorus ranging in doses from the one-sixteenth to the one-eighth of a grain, and in a few instances with success: never witnessed any bad effects from the same. In the versatile form of the disease, stimulants do no good; the chief remedies are shower-baths and musk.

Dr. Underhill referred to Prof. Huss, of Stockholm, who in 3186 cases used nothing but phosphoric acid, and nearly all the cases recovered.

Dr. Garrish extolled the use of stimulants in typhoid and typhus, but finds that the greater part of the profession treat typhoid fever in the beginning too harshly, by giving harsh purgatives, mercurials, etc., etc. Dr. G. favors the administration of one or two blue pills, to be followed by an eccoprotic mixture; liquor ammoniæ acetatis in ounce doses every third or fourth hour, and cool drinks. Insists on good ventilation, very few visitors, and gives generous support. As soon as the tongue begins to get dry and brown, recommends the carbonic acid water, which allays the thirst, and relieves the distressing pain in the back. At this period he suggests the administration of quinine, wine whey, whiskey, or the best of brandy, and plenty of beef-tea, prohibiting all visitors at this stage. Dr. G. is sure that the treatment is less at fault than the surroundings, and earnestly hoped that the removal of typhoid fever patients, as suggested by Dr. Thoms, be strongly urged upon the proper authorities by the profession.

Dr. Finnell was surprised to hear Dr. Garrish say that the majority of our physicians commenced the treatment of typhoid and typhus by giving mercurials and purgatives, stating that his experience had been otherwise.

In addition to his previous question, he would like to ask—What amount of stimulants is safe to administer? Is himself in the habit of giving definite directions as to the quantity and time of its administration. Usually directs that half an ounce be given at first every three hours, then the same quantity every two hours, and seldom exceeding half an ounce every hour when the disease is at the worst. Believes that through ignorance on the part of friends, and sometimes through carelessness on the part of the medical attendant, too much stimulant is given, which has the effect of producing local congestions that in themselves occasionally destroy the patient.

Related a case where it was very freely administered for several days with benefit, but while recovering from the fever, delirium tremens (if such a thing can follow typhoid fever) came on. In respect to phosphoric acid, he would state that it was now being used in those cases under treatment, and apparently with benefit.

Dr. Wooster replied that very low fevers require frequently a quart of brandy, or a still larger amount of whiskey (now the most fashionable and most reliable stimulant), in the course of twenty-four hours, until the periodic limitation of the disease has arrived. He considers stimulation, nutrition, and ventilation, the chief requisites in the management of those fevers. This bold, stimulating course has been pursued by him for the last twenty years; and though in many cases he has felt that his patients had not sufficient stimulus, he has never had occasion to regret having given too much.

In one case only has he ever witnessed intoxication, and that was on the twenty-third day (in his absence from the patient), the quantity of stimulant not having been diminished as was usual after the twenty-first day. This had been an extremely low case, and he never saw a more rapid recovery.

Dr. James Kennedy said that whatever opinion may be entertained regarding the pathological difference between typhoid and typhus fevers, there certainly could be but very little difference, if any, in the treatment. Remedies should always be addressed to symptoms, and not to names. The treatment of these two fevers, in his opinion, should be stimulating and tonic, with all the appliances necessary to sustain the system generally. A healthy location, a large room, well ventilated, which would admit plenty of fresh and wholesome air, quietude, and avoidance of all irritations of any kind.

At the commencement of the disease very little medicine will be required. A gentle alterative cathartic, *i.e.* a blue pill and a little magnesia, may be quite sufficient. At what time and to what extent stimulants and tonics should be given in this form of fever, must be determined very much by the skill, good sense, and judgment, of the attending physician. As a general rule bad symptoms are to be expected in typhus fever, and should be anticipated by the early use of remedies. Some years ago Dr. K. was called to visit, in consultation with three old and highly respectable physicians of large practice in this city, a young man. He found the patient laboring under symptoms indicating speedy dissolution: dry skin, brown-black tongue, furred and cracked, pulse rapid and tremulous, subsultus tendinum, delirium succeeded by stupor from which it was difficult to rouse him, petechia, jerking at the bed-clothes, involuntary discharges from the bowels and urinary bladder, etc., etc. Dr. K. inquired when those symptoms first appeared? Two or three days ago! was the answer. Infusions of serpentaria had been given, and the day before a small quantity of wine whey. Dr. K. advised to give the patient as much brandy and porter as they could without measure, beef-tea, quinine, and so forth. His suggestions were immediately adopted, and the next day the symptoms were more favorable, and the young man finally recovered.

The alcoholic stimulants preferred by Dr. K. are St. Croix and Jamaica rum, given either hot or cold, with sugar and water, or in the form of milk punch. Perhaps it would be as well to leave the selection of the liquor to be used, and the mode of its preparation, to the choice of the patient. Wine whey, beef-tea, quinine, acidulated drinks, etc., are the chief internal remedies. Sponging the surface of the body with warm vinegar and water or common whiskey will be found not only agreeable to the patient but of much service to him.

The success of the treatment will very much depend on the skill of the attending physician, and the knowledge and attention of the nurse. It is worthy of remark, the large quantities of stimulants some patients will not only tolerate but absolutely require at certain periods of this disease, and the vast difference between patients in that respect. While a pint of rum would be quite enough for one in twenty-four hours, another might require two, three, or four times that quantity in the same time.

Dr. Joel Foster thinks that a smaller quantity of stimulants would answer, if only more beef-tea was given. Admits of no rule as to quantity or the time of commencing it.

TREATMENT FOR THE PEYERIAN LESION.

Dr. Benjamin Lee stated that no allusions had been made during the present discussion as to any treatment directed especially to the characteristic lesions of the disease under consideration. He referred to the intestinal complications known as ulceration of Peyer's patches. There can be no doubt that this ulceration interferes with nutrition, and the exhausting haemorrhages thus resulting are often indirectly, and in some cases immediately responsible for the fatal result. While, then, the main treatment must evidently be directed to husbanding the patient's strength until the disease has exhausted itself, we are not justified in limiting our efforts to this while we have so evident and so alarming a local lesion to contend with, which may possibly be directly met.

Prof. Wood, of Philadelphia, as is well known, insists strongly on the oil of turpentine as better adapted than any other article in the materia medica to fulfil this indication. But whether the benefit derived from its use is to be attributed to this specific action, or rather to its general stimulating properties, is somewhat doubtful.

Other remedies, principally the astringents, have been suggested, but their success has not been great.

It occurred to Dr. L. during the past winter to see a manuscript paper by a former professor and well known practitioner in this city, recommending the exhibition of arsenious acid in the solid form, in doses rather larger than the standard amount, with a view to meet this complication.

The remedy is advised to be used very early in the disease, and administered regularly, as often as twice daily. Care should be taken to give it only immediately after the ingestion of food in order that any local irritation of the coats of the stomach may be avoided, and to insure its rapid and complete assimilation.

The author claimed that the remedy acted not directly upon the mucous surface, but through the circulation, in giving tone to the capillary vessels of the mucous coats; thus not healing up the ulcers after they had formed, but preventing their formation. The result of his experiments is, that a much larger quantity of arsenious acid can be given in the solid form than in solution, without injury to the coats or the stomach or intestine, and especially if it be taken up with food. A sufficient number of cases were detailed to entitle the suggestion to a respectful consideration, but he was not yet prepared to make it public.

Dr. L. thinks, however, that he betrays no confidence in making this statement, and would request any member who may have hospital cases in which a trial would be admissible to bear it in mind.

Dr. Lee stated that he should not hesitate to make the experiment himself in any case that might present itself.

FOREIGN CORRESPONDENCE.

LETTER XXXVIII.

By PROF. CHARLES A. LEE.

VENICE—ITS CLIMATE, PHYSICAL HISTORY, MUD-BATHS, ENGLISH PHYSICIANS.

Venice, Oct. 25, 1862.

In my previous letter I spoke of some of the peculiarities of the climate of Venice. Since then I have made other researches, which go to show that during a series of years snow has fallen on six days of the winter, and that although the hygrometer indicates a high degree of humidity, especially when the wind blows from the sea, yet that there are many maritime towns in southern Italy, frequented by invalids, which give a similar mean. This, indeed, is true of Rome and other towns at some distance from the sea, not surrounded by morasses. During a series of seven years the number of rainy days has not exceeded seventy-five, which is as low as in any part of southern Italy, while the annual quantity of rain is less than in many of the southern towns. The physicians here attribute many of the peculiarities of the Venetian climate to the influence of the north-east wind; for, besides dispersing the miasma, as already stated, it is said to be mainly influential in causing the vicissitudes of the weather, and the particular character of the annual climate. As it sweeps down from the northern part of the gulf, carrying before it all atmospheric impurities, it speedily brings on a copious rain, especially when it succeeds a warm and damp wind; not of long continuance often, when the sky clears up, and the atmosphere becomes pure, transparent, and mild. In winter the same wind is apt to bring snow. Often a terrific thunder-storm breaks over the gulf when the same wind encounters the blasts blowing from the sea, while, at the same time, the sun shines with splendor over the city, gilding all her domes and marble palaces.

I have alluded to the changes going on in the character of the Venetians, and even the expression of their features, from the tyrannical and iron rule of the Austrians. The climate, we know, must necessarily favor a life of indolence and voluptuous ease, a state of inertia in which the moral and physical energies are equally dormant; yet no one can take a retrospective view of Venetian history without admiring the lofty courage, the undaunted bravery, the heroic deeds, the wonderful achievements of this small republic from its foundation, almost contemporary with that of Rome, down to the final extinction by Buonaparte in 1797. A tinge of melancholy, pride, and graceful dignity still shines prominently forth in the countenances of the descendants of the old nobility, but this is replaced by a malignant scowl of mingled scorn and hate at the sight of an Austrian soldier or the thought of Austrian rule. The marvellous silence which reigns over this city of 120,000 inhabitants is emblematic of her national extinction, and quite consonant with the death-like vitality of her people. Whether it is that these moral causes have modified and changed the physical character of the Venetians, I cannot say; but certain it is that they now exhibit the nervous temperament developed to the very highest degree. "To die of a rose in aromatic pain," might almost literally apply to the inhabitants of Venice. Nervous diseases are therefore most frequently met with. On this point the physicians here are all agreed; and they also admit that bloodletting has to be practised here with far more caution than in some other parts of Italy, as death not unfrequently supervenes on a fit of fainting consequent on loss of blood. So free is the city of intermittents, and so salubrious its climate considered, that it is not unusual for patients suffering from malarious fever to come here to recover from its attacks. The mildness and equability of the winter climate attract many patients here annually from the north of Europe, especially from England, who seem to relish greatly the quiet tranquillity and repose which prevail over the city; and it is said that some forms of paralysis, as well as neuralgic pains, are frequently benefited by a few months' residence. As adjuvants in the treatment of these affections, there are saline and mineral mud-baths, besides baths composed of sand and warm salt water, all of which are held in high esteem by the local physicians as producing stimulating and resolvent effects.

These mud-baths, by the way, are extremely popular in Italy. For instance, Abano, on the route from Mantua to Padua, is celebrated for its *muds*, as well as its warm mineral springs. These are applied either generally or partially, as the case of the patient may demand. These are thrown by after having been used, and, at the conclusion of the season, returned to the hot fountain, where they are left till the ensuing spring, that they may become impregnated anew with the mineral virtues which these are supposed to contain. The most obvious of these are salt and sulphur. The muds are, on being taken out, intensely hot, and must be kneaded and stirred some time before they can be borne. When applied—an operation which very much resembles taking a cast—they retain their heat without much sensible diminution for an hour or longer, having the effect of a slight *rubefacient* on the affected part, and producing a profuse perspiration over the whole body. Heat is considered as essentially aiding the operation of this treatment; hence it is generally abandoned about the end of August. The water-baths, as in Venice, are only regarded as auxiliary to the mud treatment, serving both as prologue and interlude, and, in my judgment, not unfrequently as a farce.

There are generally two or three English physicians resident practitioners in Venice, as there are, also, in most of the other large towns in Italy frequented by English tourists and invalids. These are very apt to recommend their respective localities as especially suited for English patients. Those in Venice tell us, with considerable plausibility, that Englishmen, who have acquired a torpid and lymphatic temperament by living under the leaden skies and humid atmosphere which tend to depress the nervous system, experience a favorable change under the bright skies and purer air of Venice. But, so far as my experience or knowledge goes, the character of the Venetian climate is decidedly sedative, and that without regard to the country from which the traveller or invalid may come. It was for this reason, probably, that the Roman gladiators were sent to this part of Italy to reduce their plethora, diminish the excess of blood, and put them in good fighting condition, as related by Strabo. So far as I can ascertain, patients laboring under pulmonary consumption, except in its earliest stages, are not benefited by this climate, but the tubercular softening is much accelerated. So, also, patients who are much depressed, or debilitated from any disease, especially those of a sanguineous or irritable habit, will find the climatic influences too relaxing and prostrating. It is a very common practice here to prescribe decoctions of the marine confervæ, on the principle, I suppose, that every region ought to produce the remedies needed to cure the diseases of that locality. It is very possible that they may have some beneficial effect in scrofulous affections. There can be little doubt but that the Venetian climate is well suited to cases of bronchial inflammation, chronic catarrh, and spasmodic asthma. The portion of Venice which is preferred as residence for the consumptive invalids is also the liveliest and most beautiful quarter of the city, viz. the Piazza of St. Mark, the Piazzetta, and the greater portion of the Grand Canal as far as the Rialto.

The weather, since I came here, has been splendid: the temperature about 65°, neither too hot nor too cold; the atmosphere clear from clouds and vapor, and a transparency and purity of air that I have never seen surpassed in any part of the world. But I meet with tourists who have spent one or more winters in Italy, who tell me that the Italian climate is a humbug; that although October is a delightful month, the least objectionable of any in the whole year, yet that the winter climate is actually worse than that of England; that they are always chilly, and can nowhere find shelter from the piercing cold, etc. Much of this complaint may perhaps be attributed to the British habit of grumbling at everything out of their own country (even the roses here are too fragrant), but still more to the fact, that in more northern climes the houses are prepared for the severity of the weather, and thick carpets, good stoves or grates, well closed doors and windows, with bright sea-coal fires, enable the Englishman to defy the winter. Here it is said that the cold is more intense within the house than without, as not a single window or door is air-proof, and a bright fire only increases the number and chilliness of the various currents which rush through every chink and crevice. As testimony to this effect is pretty uniform, we may very safely conclude that a winter residence in any part of Italy is not without very serious drawbacks. On this point, however, I shall be better prepared to give an opinion after I have had some personal experience. I will, however, say, that in my judgment there is not a more pitiable sight in the world than that of patients far advanced in consumption wandering over Italy in search of health. They must have strange forebodings on visiting the cemeteries, which are crowded with the tombs of foreigners who came here for health, but who perished of phthisis. How can invalids who are always sensitive and irritable, generally unacquainted with the language, the people, and the habits of the country, expect to avoid a thousand vexations and trials, thus increasing the sufferings they had expected to mitigate, and hastening the progress of a malady they had confidently hoped the climate would retard or avert? Home, and its consolations, comforts, and conveniences, are too little prized by the invalid, who, seduced by the enchantment of distance, and the interested statements of local practitioners, relinquish the last chance and the last hope of recovery, to wander and perish among strangers in a distant land. We shall see, hereafter, that although the extreme range of temperature is not as great in Italy as in our own country, yet the changes and variations are frequent and sudden, and felt quite as sensitively, and probably more so, than with us. And then there are the fatigue, discomfort, and risk, attendant upon changing their place of residence as the seasons change, to say nothing of the mania of sight-seeing, which is constantly exposing them to risks and dangers of every kind.

I am satisfied much has yet to be learned regarding the effects of climates, and of change of climate, as influencing the progress of disease. It seems to me highly probable, if not absolutely certain, that nature has adapted the constitution of man to his hereditary climate, and that it is hardly consistent with nature's laws and operations that a person born in our country, when attacked with tubercular disease, can be cured by a foreign climate entirely different from his own. The mortality from consumption is vastly greater in warm than in cold countries. What is wanted is a *uniform*, not a *warm* climate. The latter always facilitates tubercular softening, and hastens the final termination. A change of climate necessitates acclimation, and thousands sink under the probationary process from fatigue and exhaustion. The greater sensitiveness to cold, from the increase of the nervous temperament, caused by greater heat, more than counterbalances the alleged good effects of warm climates. If a change is deemed advisable or necessary in consumption, let it be a change of air in the same climate where the patient and his ancestors were born, and not a violent transition to to warm countries. There can be no doubt whatever that the climate of the United States, embracing the utmost variety from the great lakes and the St. Lawrence to the Gulf, and from the Atlantic to the Pacific, affords to the pulmonary invalid greater chances of recovery than can be found in Italy or any other section of the globe.

American Medical Times.

SATURDAY, JUNE 27, 1863.

SUICIDE OF ALLEGED CRIMINALS.

Readers of our city papers must have noticed the frequent instances of attempts at suicide by persons detained in confinement. These occurrences would not be worthy of remark if they were limited to prisoners awaiting the execution of the death-penalty, or even condemned to a long period of imprisonment. We should than have an adequate cause for the attempted self-destruction, for in all periods of history, criminals have been guilty of this crime. But in this instance the crime is more frequently attempted by quite another class of prisoners: they are those persons who are awaiting their trial, and who have been charged with grave crimes. In nearly every case the victim of self-destruction has left behind him an explanation of his last criminal act. The exciting cause, if it may be so designated, is confinement in the dreary, noisome cells of a City Prison. No sane person can be taken from the fresh air and sunlight, and be immured in these gloomy recesses, more dreary than the niches of a catacomb, for any considerable period, without coming to prefer life to death. Shut out from even a ray of sunlight, stifled by the dead and lifeless atmosphere of a living tomb, permitted no other liberty than to pace the length of his own body, the mind of the prisoner gradually loses its susceptibilities; the past with its pleasant memories aggravates the miseries of the passing hour, and the future takes coloring from the gloom and melancholy of the present. He implores to be put on trial, and either by acquittal or condemnation be relieved from the horrors of a living death. But courts do not hear his petition, and his case is adjourned for long weary months. Meanwhile the prisoner is gradually approaching suicidal mania or melancholy, and suddenly, and often unexpectedly, he takes the fatal step. As yet his guilt or innocence is unproved. This violent termination of his life is, however, in the public estimation, sufficient evidence of his guiltiness, and upon the poor man's memory is stamped the ineffaceable stigma of crime.

It is a well established maxim of criminal law, that the accused shall be regarded as innocent until he is proved to be guilty. In this approved decision of our courts we have a beautiful illustration of justice leaning to the side of mercy. For, the mere arrest of a person charged with the commission of crime might be taken as presumptive evidence of his guilt; and for the general good, as well as protection of society, he might, with the greatest propriety, have been treated as a criminal until proven to be innocent. But mercy has so far tempered the decrees of justice that the humanitarian view has been universally adopted, and the accused stands before the court an innocent person until proved to be guilty.

It would seem to follow, as a natural sequence from this maxim, that persons arrested for crimes should be treated as if innocent; that they should be placed under such restraints, or bonds, as will simply insure their appearance in courts, and that they be not otherwise deprived of their liberty. It is but right that a person who is believed to be innocent, and who in the eye of the law is innocent, should have all the privileges of an innocent person. There would seem to be a manifest injustice in removing such persons even from their ordinary duties, and much more to subject them to confinement. It might with great propriety be added, that the citizen who allows himself to be accused of crime, and to be put on trial, yields sufficiently to the necessities of society without being subjected to any further humiliation until he is proved to be guilty. But practically the law reverses its own wise and humane maxim. It not only demands the arrest of the accused but condemns him, before trial, to a felon's or a murderer's cell. In close and solitary confinement, deprived of every social, domestic, and political privilege, the accused remains for months, and often for years, before the question of guilt is determined.

Our criminal jurisprudence should be radically changed. Either the accused should be immediately put on trial as soon as the necessary evidence is obtained, or he should be held to appear by suitable bonds. If restraint is absolutely necessary to insure that appearance in case of capital offences, provision should be made for his comfort in keeping with the spirit of the law, which as yet regards him as innocent of the alleged crime.

THE WEEK.

The necessity of an ambulance system is again brought to the attention of the public by Dr. Bowditch, of Boston, and with a personal appeal rendered impressive by the illustration which he draws from his own bereavement. His son, Lieut. Bowditch, was mortally wounded in the abdomen at Kelly's Ford, and, though left in the rear of the advancing column, received no assistance except what was accidentally afforded him. The ambulance which he finally reached had no water, the driver was ignorant and careless, and the wounded officer had neither proper nor adequate attention. It is surprising that the obstinacy of a single official should be allowed to prevent the organization of an ambulance system. The people should demand it, and with an authoritative voice.* Congress and Cabinet should be flooded with petitions, and delegations from the people should personally urge this subject until a system is adopted.

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The recommendation of the *Illinois State Medical Society*, that the **American Medical Association** choose its President independently of the location of the individual meetings, is important, and should be adopted. This custom has already led to much embarrassment of the members, and local strife and jealousies in the profession. **Prof. Davis** took a manly stand in this matter, and his example is well worthy of future imitation.

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The Medical Board of Bellevue Hospital have reviewed their action recommending the creation of specialties in that institution, and have come to the very opposite conclusion. They now advise only an out-door department, where diseases may be classified as in a dispensary. A census of the hospital shows too few diseases of the kind referable to the several proposed specialties, and the Board prefers to retain those in their present positions.

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The Index to this volume will appear next week.

Correspondence.

THE MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

[To the Editor of the American Medical Times.]

New York, June 20, 1863.

Sir:—In reading over my report of the Fourteenth Annual Meeting of the American Medical Association, recently held in Chicago, and published in your issues of the sixth and thirteenth inst., it has occurred to me that there are a few matters of interest not touched upon, and one or two errors which an informal letter of this kind may serve to correct.

As sins of commission are usually regarded as more mischievous in their effects than those of omission, let us first proceed to correct the errors. Of these, the first which struck my attention was contained in the published resolutions of the Association with reference to the famous *calomel and tartar emetic order* of the Surgeon-General of the U. S. Army. The resolutions published in your Journal were indeed submitted, but after some five or six hours' debate they were rejected by a very considerable majority, and the following were finally adopted in their stead:—

Resolved, 1.—That this Association condemn, as unwise and unnecessary, the circular of the Surgeon-General prohibiting the further supply of Calomel and Tartar Emetic for use in the Army; and that we regard such an order as an indignity to the military surgeons, while it is in direct opposition to the opinions of the regular profession of medicine.

Resolved, 2.—That the withholding ordinary medicines from the army surgeons implies a want of confidence in their skill as a body, which, if true, calls for the prompt interposition of the proper authorities; but if the imputation of a want of skill is unfounded, as we believe it is, the refusal to supply proper medicines is wholly unjustifiable.

Resolved, 3.—That Circular No. 6 being impolitic and prejudicial to the interests of the service, it is the decided sense of this Association, that a due regard for the welfare of the Army requires, and we do, therefore, earnestly recommend, the rescission of that Circular, and the substitution of the more just and philosophical method of correcting abuses, if any exist, by holding each surgeon, individually, responsible for the proper discharge of his appropriate duties.

I was very much pleased with the position taken by Dr. S. S. Cox, of the U.S. Army, during the discussion on these resolutions. He took the ground that the order was issued as a matter of expedience by the Surgeon-General, and had no reference to the practice of medicine outside of the army. It was not a question whether calomel and tartar emetic should be used in the practice of medicine, but whether, in the peculiar circumstances in which soldiers were placed, it would not be better to dispense entirely with their use. He deprecated any interference on the part of the profession outside of the army, and considered the army surgeons should be left to express their own dissatisfaction whenever they should feel any occasion to do so.

I cannot equally endorse the views of a delegate from Indiana, who, in endeavoring to defend the order of the Surgeon-General, went much further than he in deprecating the use of calomel under any circumstances. Without attempting to pause upon the soundness of this gentleman's views of physiology and therapeutics, I would merely state that, whether right or wrong, they were irrelevant to the subject under discussion.

The second error which I noticed is apparently a mere trivial one, but nevertheless should be corrected. I stated "That only one essay had been published which was worthy of the prize medal." It would be more correct to state that only one essay was submitted, and that this was deemed well worthy of the prize, which I believe is not a medal at all, but one hundred dollars in current funds. Of course it in no wise detracts from the great merits of Dr. Percy's paper that it had no competitors, but it shows a lamentable want of interest in this subject on the part of the profession at large.

Another illustration of this same want of interest on the part of the profession is to be found in the fact, that of some sixty delegates from the city of New York, only seven were present, viz. Drs. William N. Blakeman, Alfred Underhill, Henry S. Downs, John H. Griscom, E. S. F. Arnold, H. G. Davis, and Guido Furman, and from Long Island not one. Why is it that, in a body so respectable and influential as the American Medical Association, we do not find the names of such men as Professors Van Buren, Clarke, Metcalfe, Dalton, Draper, Post, Barker, etc., etc.? Is not *their* interest and the interest of medical science identical? Let us hope that another year will witness a reform in this respect. Notwithstanding this dereliction on the part of New York city, the meeting of the Association was in the main well attended. Seventeen States, one Territory, and the Army and Navy were fully represented, making in all one hundred and eighty-nine delegates.

The Association was very fortunate in having so able and courteous a presiding officer as Dr. Wilson Jewell, of Penn. His retiring address, of which a synopsis is given in your report, was worthy of all praise. The chairman of the Committee of Arrangements, Dr. N. S. Davis, of Chicago, delivered the opening address, of which I also gave a synopsis. The labors of this gentleman in behalf of this Association have been far more arduous than has generally been supposed. I think I am perfectly safe in asserting that there would have been no meeting of the American Medical Association this year, had it not been for the efforts of Dr. D. As to the imputation that had been cast upon his loyalty, I am equally safe in asserting that they owe their origin entirely to personal animosity. His opening address was a sufficient rebuke to all such slander. As I have heard it intimated that it was only on the account of these imputations that Dr. Davis failed to be elected President of the Association, it may be interesting to your readers to know what are exactly the facts of the case. At the meeting of the Illinois State Med. Society, of 1860, the following resolutions were unanimously adopted:—

Whereas, The American Medical Association is a national Association, composed of delegates and members from all parts of the United States, meeting on terms of perfect equality:

Therefore. *Resolved*, That in the opinion of this Society, all the officers of the Association should be selected strictly with reference to *merit*, and without any regard to their place of residence.

Resolved, That the custom of selecting the President of the Association exclusively from the profession of the city in which the Annual Meeting is held, is not only derogatory to the general character of the organization, and calculated greatly to lessen the honor which should attach to that office, but past experience has shown that it leads directly to local divisions, jealousies, and injurious partisan strife.

Resolved, That the delegates from this Society to the Association, be instructed to use their influence to abrogate the custom alluded to in the preceding resolution.

Resolved, That the Secretary be directed to furnish copies of the foregoing resolutions to other State and Local Medical Societies, and ask their attention to the same.

In view of these resolutions Dr. Davis sent the following letter to the members of the nominating committee:

To the Members of the Nominating Committee of the American Medical Association.

Inclosed you will find a series of resolutions adopted by the Illinois State Medical Society at the regular annual meeting in 1860, and which have not been modified or rescinded. They accord fully with the sentiments which I have entertained and acted upon for many years. And if in accordance with the custom mentioned in the second resolution your committee should allude to my name as a candidate for the office of President, please be kind enough to immediately read this letter and the accompanying resolutions to the committee, with the assurance that, while such custom or precedent is followed, I cannot allow myself to become a candidate for that high position. I earnestly hope your committee will discard all former customs and precedents, and nominate all officers with sole reference to the principle embodied in the first resolution.

(Signed) N. S. Davis.

Chicago, June 1, 1863.

Notwithstanding this protest on the part of Dr. Davis against the use of his name, he received eight of the seventeen votes cast by the committee, wanting one vote of the requisite number for election.

After the election of Dr. March the duties of the chair were divided about equally between himself and Vice-President Dr. Cox. From the paucity of their reports I judge the standing committees of the Association to be merely ingenious contrivances for bringing the names of their members into publicity, without imposing upon them any very arduous duties.

The very able paper of Dr. Andrews on "Diathesis in its Surgical Relations," was very favorably received. It did great credit to its author. The gratitude of the Association is due to the retiring Secretary, Dr. Hubbard, of Connecticut, for the very efficient and courteous manner in which he discharged the onerous duties of his position.

Apropos of the position of secretary—it was a valuable suggestion of Dr. Davis, that a permanent secretary be appointed, in order that there might be some responsible custodian of the archives of the Society. It is to be hoped that such an appointment will be made. Another valuable suggestion was that contained in the resolution providing for the election of the officers of the Association at the end of each session for the ensuing year, thereby enabling the Society to enter upon its active duties as soon as convened, and also affording an opportunity for the newly elected officers to become thoroughly prepared for their duties before being called upon to discharge them.

The indefatigable efforts of Dr. Arnold, of Yonkers, N. Y., to compel railroad companies to make suitable provision in the event of accidents happening on their roads, deserve the grateful appreciation not only of the Association but of the community at large. Every railway train should be provided with such a supply of surgical appliances as are required in cases of accident, just as steamboats are required to carry a certain number of life-boats, buckets, and life-preservers, as safeguards against the accidents to which they are most liable.

I cannot close this letter without bearing testimony to the liberal and generous hospitality of our professional brethren of Chicago. Delightful evening entertainments were given by Drs. N. S. Davis, W. W. Allport, W. H. Byford, M. Parker, A. Groesbeck, W. Carr and son, and J. P. Ross. These entertainments were well attended, not only by the delegation but also by Chicago feminine beauties. Your correspondent is deeply indebted to the profession of Chicago, and their families, for many a happy hour.

Yours,

Correspondent.

Army Medical Intelligence.

GENERAL ORDERS, NO. 130.

War Department, Adjutant-General's Office,
Washington, May 15, 1863.

In executing the provisions of General Orders, No. 105, from this Department, in regard to the selection of men for the Invalid Corps, Medical Inspectors, Surgeons in charge of Hospitals, Camps, Regiments, or of Boards of Enrolment, Military Commanders, and all others required to make the physical examination of men for the Invalid Corps, will be governed in their decisions by the following list of qualifications and disqualifications for admission into this corps:—

Physical Infirmities that do not disqualify enlisted men for service in the "Invalid Corps."

1. Paralysis, if confined to the left upper extremity, and the man's previous occupation fit him for the duty of clerk, orderly, &c.
2. Simple hypertrophy of the heart unaccompanied by valvular lesion; functional derangement of the stomach (dyspepsia); mild chronic diarrhœa; simple enlargement of the liver or spleen; a temporary ailment of the kidneys or bladder.
3. Chronic rheumatism, unless manifested by positive change of structure, wasting of the affected limb, or puffiness or distortion of the joints.
4. Pain, unless accompanied with manifest derangement of the general health, wasting of a limb, or other positive sign of disease.
5. Myopia, unless very decided or depending upon structural change of the eye.
6. Stammering, unless excessive and confirmed.
7. Loss of teeth or unsound teeth.
8. Torticollis.
9. Reducible hernia.
10. Hæmorrhoids.
11. Stricture of the urethra.
12. Incontinence of urine.
13. Loss or complete atrophy of both testicles from any cause; permanent retention of one or both testicles within the inguinal canal.
14. Varicocele and cistocele.
15. Loss of left arm, left forearm or left hand, if the man be qualified for duty of clerk or orderly.
16. Loss of leg or foot, provided the man have the inclination and aptitude for service in a general hospital, and is recommended for that duty by a medical officer, or if qualified for the duty of clerk or orderly.
17. Old and irreducible dislocation of shoulder and elbow in which the bones have accommodated themselves to their new relations.
18 Muscular and cutaneous contraction of left arm, provided the man may be employed as clerk, orderly, or messenger.
19. Loss of left thumb; partial loss of either thumb.
20. Loss of first and second phalanges of all the fingers of the left hand.
21. Total loss of any two fingers of the same hand.
22. Total loss of index finger of right hand.
23. Permanent extension of any finger of the right hand; permanent extension or contraction of any finger of the left hand.
24. Adherent or united fingers.
25. Loss of any toe or toes except the great toe; all the toes joined together.
26. Deformities of the toes, if not sufficient to prevent walking.

27. Large, flat, ill-shaped feet that do not come within the designation of talipes valgus.

28. Varicose veins not accompanied with ulcerations.

29. Gunshot wounds or injuries not involving loss of function.

30. None of the foregoing infirmities disqualify officers for service in the Invalid Corps.

In all cases where the physical infirmities of officers or enlisted men come within the provisions of the above list, they will be recommended for transfer to, or enlistment in, the Invalid Corps; but no one will be admitted into this corps, whose previous record does not show that he is meritorious and deserving, and that he has complied with the provisions of General Orders, No. 105, War Department, Adjutant General's Office, 1863, authorizing an Invalid Corps.

Physical Infirmities that disqualify enlisted men for service in the Invalid Corps.

1. Manifest imbecility or insanity.

2. Epilepsy, if the seizures occur more frequently than once a month, and have obviously impaired the mental faculties.

3. Paralysis or chorea.

4. Acute or organic diseases of the brain or spinal cord; of the heart or lungs; of the stomach or intestines; of the liver or spleen; of the kidneys or bladder, sufficient to have impaired the general health, or so well marked as to leave no reasonable doubt of the man's incapacity for military service.

5. Confirmed consumption; cancer; aneurism of important arteries.

6. Inveterate and extensive disease of the skin.

7. Scrofula, or constitutional syphilis, which has resisted treatment and seriously impaired the general health.

8. Habitual or confirmed intemperance, or solitary vice, sufficient in degree to have materially enfeebled the constitution.

9. Great injuries or diseases of the skull, occasioning impairment of the intellectual faculties, epilepsy, or other serious nervous or spasmodic symptoms.

10. Total loss of sight, or other serious diseases of the eye, affecting its integrity and use.

11. Loss of nose, or deformity of nose, if sufficient seriously to obstruct respiration; ozœna, if dependent upon caries.

12. Deafness.

13. Dumbness; permanent loss of voice.

14. Total loss of tongue, partial loss, and hypertrophy or atrophy of tongue, if sufficient to make the speech unintelligible, and prevent mastication or deglutition.

15. Incurable deformities of either jaw, whether congenital or produced by accident, which would prevent mastication and greatly injure the speech.

16. Tumors of the neck impeding respiration or deglutition; fistula of larynx or trachea.

17. Deformity of the chest, sufficient to impede respiration, or to prevent the carrying of arms and military equipments; caries of the ribs; gunshot wound of the lung, if complicated with fracture of a rib.

18. Artificial anus; severe stricture of the rectum.

19. Total loss, or nearly total loss, of penis; epispadia, or hypospadia, at the middle or nearer the root of penis; stone in the bladder.

20. Confirmed or malignant sarcocele; hydrocele, if complicated with organic disease of the testis.

21. Excessive anterior or posterior curvature of spine; caries of the spine; lumbar abscess.

22. Loss of a thigh.

23. Wounds, fractures, tumors, atrophy of a limb, or chronic diseases of the joints or bone that would prevent marching or any considerable muscular exertion.

24. Anchylosis, or irreducible dislocation of the shoulder, elbow, wrist, hip, knee, or ankle-joint.

25. Muscular or cutaneous contractions from wounds or burns in degree sufficient to prevent useful motion of the right arm or of the lower extremities.

26. With the exception of those paragraphs which refer to the total or partial loss of an extremity, the foregoing disabilities disqualify officers as well as enlisted men for service in the Invalid Corps.

In all cases where the physical infirmities of an officer or enlisted man come within the provisions of this list, or where his previous record shows that he is not entitled to be received into the Invalid Corps, he will, if in service, be discharged, and if an applicant to re-enter, his application will be disapproved.

Whilst the government is most anxious to provide for and employ, to the best of their abilities, those faithful soldiers who, from wounds or the hardships of war, are no longer able to perform active duty in the field, yet it can, upon no account, permit men, undeserving or totally disabled, to re-enter its service.

Those faithful soldiers whose physical infirmities are too great to admit of their being of any use in the Invalid Corps will, nevertheless, receive the pensions and bounties provided by law.

It is further announced that no officer or enlisted man shall be entitled to or receive any pension, premium, or bounty, for enlistment, re-enlistment, or service in the Invalid Corps. They will receive all other pay and allowances now authorized by law for the U. S. Infantry except the increased pay for re-enlistment. Claims for pensions or bounties which may be due for previous service will not be invalidated by enlistment in the Invalid Corps. But no pensions can be drawn or accrue to the benefit of any man during his service in said Corps. The officers and men will be organized into Companies of Infantry, of the same strength as is now authorized by law for the U. S. Infantry. No organized Brigades, Regiments, Companies, or parts of Companies, will be accepted as such. Enlistments in this corps will be for three years, unless sooner discharged.

By order of the Secretary of War.

E. D. Townsend,
Assistant Adjutant-General.

ORDERS, CHANGES, &c.

Leave of absence for thirty days has been granted to Surgeon G. W. Jackson, 53d Pennsylvania Vols.

So much of Special Orders 205, current series, Adjutant-General's Office, as dismissed Surgeon J. C. Bassett, 29th Massachusetts Vols., has been revoked, he having been previously honorably discharged by S. O. No. 38, Headquarters 9th Army Corps.

Surgeon E. P. Gray, 78th New York Vols., has been transferred to one of the regiments of U. S. colored troops to be organized under Brig. General Ulman, U.S.V. General Ulman, U.S.V., will designate the regiment to which Surgeon Gray will be assigned.

Surgeon James L. Farley, 84th New York Vols., having been absent, sick, for a period of over four months, has been honorably discharged for physical disability.

Leave of absence for twenty days has been granted to Surgeon Henry Bryant, U.S.V.

Assistant-Surgeons John Bradley, Robert Reyburn, Alexander M. Speer, S. E. Fuller, G. F. Freuch, and R. A. O'Connell, have been promoted Surgeons of Volunteers to date from June 13, 1863.

The order revoking the appointment of Assistant-Surgeon A. C. Schwarzwelder, has been annulled, and he has been ordered to resume his duties in charge of the Shumard Hospital at Hickman, Ky.

Surgeon W. S. King, U.S.A., recently Chief Medical Officer at Philadelphia, Pa., has been ordered to report to General Darius N. Couch, commanding Department of the Susquehanna, for duty as Medical Director.

Surgeon Josiah Simpson, U.S.A., has returned from Chicago, Ill., where he went as delegate to the American Medical Association, and has resumed his duty as Medical Director of the Middle Department, at Baltimore, Md.

Surgeon George S. Kemble, U.S.V., recently restored, and now awaiting orders at Ligonier, Westmoreland Co., Pa., has been ordered to report in person to Major-General Graut, commanding Department of the Tennessee, and by letter to Assistant Surgeon-General Wood, at St. Louis, Mo.

Assistant-Surgeon C. C. Byrne, U.S.A., now waiting orders in Washington, D. C., has been ordered to report in person to Major-General Rosecrans, commanding Department of the Cumberland, and by letter to the Assistant Surgeon-General, at St. Louis, Mo.

Surgeon E. Swift, U.S.A., has relieved Surgeon W. S. King, U.S.A., in charge of the affairs of the Medical Department of the army, at Philadelphia, Pa.

Surgeon B. A. Vanderkieft has been assigned to the charge of U.S. General Hospital, Division No. 1 (formerly Naval Academy), instead of St. John's College Hospital, as reported in our paper of the 13th inst.

THE

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Being a Weekly Series of the New York Journal of Medicine.

EDITED BY

STEPHEN SMITH, M.D.

ASSOCIATE EDITOR,

GEO. F. SHRADY, M.D.

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Original Lectures.

LECTURES ON DISEASES OF THE EYE.

By HENRY D. NOYES, M.D.,

ASSISTANT SURGEON N. Y. EYE INFIRMARY.

LECTURE VII.

DISEASES OF THE LACHRYMAL APPARATUS.

Diseases of Lachrymal Apparatus.—The lachrymal sac and nasal ducts are the parts of the derivative apparatus which are most frequently diseased. The primary affection is usually *catarrh* of the mucous membrane.

This may originate from inflammation of the eyelids or of the Schneiderian mucous membrane. It often occurs in young children of a scrofulous constitution simultaneously with catarrh of the nasal passages, and it may take place as an acute attack at any period of life. It more usually comes on gradually, its incipient stages being scarcely observed. The secretion of the mucous membrane, which is naturally thick and glairy, becomes more consistent and opaque; it accumulates in the sac, and gives rise to a slight fulness at the inner angle of the eye. Pressure causes the swelling to subside by pushing the mucus into the nostril or into the conjunctival sac. There will be slight congestion of the palpebral conjunctiva. The eye will be filled with tears, and on exposure to wind they will flow copiously over the cheek. The mucous membrane of the sac and duct is swollen and spongy, and the calibre of the nasal duct is diminished. The valvular folds of the membrane become tumefied, and oppose a decided obstacle to the flow of fluid into the nasal fossa. Hence, before organic stricture has formed, pressure over the distended sac will often cause its contents to regurgitate upon the conjunctiva.

Soon, however, the infiltration of the mucous membrane assumes a more organized form, because this tissue is a fibro-mucous layer. Fibrous tissue appears in it, and constitutes a permanent stricture. Its situation may be at any point of the duct, or through its whole extent; its common seat is at the valvule which marks the beginning of the duct. The formation of such a stricture is a very slow process, and during this time the patient is more or less annoyed by catarrh of the lachrymal sac. The sac becomes more and more distended, and its lining membrane more and more deeply diseased, giving rise to an abundant secretion of muco-pus.

It may attain an extraordinary size—a hazel-nut might in many instances be accommodated within it. Pressure on this tumor evacuates its contents chiefly through the puncta. It may be painless, and continue for a long time in a passive state. But suddenly a new phase presents itself: acute inflammation is set up, and abscess forms. This may occur at various stages of the malady, either before or after the lachrymal sac has become distended enough to deserve the name of mucocele. The abscess forms in the loose areolar tissue around the sac, and soon ulcerates into it. It produces great swelling of the integuments. Especially in the sulcus below the lower lid the skin is tense, red, and hot; pain is severe until the pus has diffused itself in the areolar tissue. The pus tends to run along the loose tissue of the lower lid. If left to itself, the skin finally ulcerates, and the matter is discharged. Relief follows, but this is too often only the beginning of sorrows. From the opening both pus and tears escape, showing a communication with the lachrymal sac. An ulcerated opening is very liable to remain patent, and result in fistula lachrymalis. This becomes not only a disfigurement but a source of continual annoyance. A succession of abscesses may occur; or the opening may close, pus form again, and make for itself a new exit, the suppurative process continuing for weeks.

A lachrymal fistula is not always an offensive opening, filled with fungous granulations; it may heal so far as to leave but a minute, almost capillary, aperture. Even in this state it gives great trouble. Tears flood the eye, the conjunctiva is inflamed, and use of the eye is almost impossible.

I need not attempt to describe these cases any further. They are of chronic character, and have no tendency towards cure. If the nasal duct is obstructed, and this need be only a partial obstruction, it is the sufficient cause of a long train of annoyances, and of liability to intercurrent attacks of inflammation. Sometimes the nasal duct becomes totally occluded; it may be filled by bony tissue. The mucous membrane may be converted into pyogenic membrane. The lachrymal or maxillary bones may become carious. St. Yves speaks of operating for caries of the bones at the bottom of the orbit, and of the danger of destroying the eye in attempting to cure lachrymal disease.

Treatment.—In the early stages of catarrh of the lachrymal mucous membrane the disease is easily managed. Astringent or caustic lotions are often applied to the eyelids. They allay the accompanying conjunctival inflammation. The very small quantum which enters the puncta can hardly be said to have a curative power over the lachrymal mucous membrane. To produce an effect upon this surface, an astringent wash must be injected through the canaliculi by Anel's syringe. The passages may first be washed out with warm water, and then the astringent introduced. In more chronic catarrh, and where the spongy mucous membrane partly closes the nasal duct, a weak solution of nitrate of silver may be injected, using it from five to ten grains to the ounce. In injecting nitrate of silver solutions through a canaliculus, care must be taken to prevent regurgitation through the other canaliculus, by squeezing it with forceps whose blades are not toothed or too rough. If the fluid can be forced into the nose, and its subsequent injection becomes more and more easy, this proceeding may cure the disease. If, however, there be great difficulty in forcing fluid into the nose, and if there be no improvement after a few trials, the presumption is that stricture of the nasal duct has begun. It always requires considerable force to use the fine-pointed syringe of Anel, and the normal resistance it offers must not be mistaken for resistance in the lachrymal passages.

Upon this presumption of nasal stricture, Mr. Bowman's method of treatment must be adopted: the inferior punctum and canaliculus should be laid open, and a probe inserted into the nasal duct. It is best to begin with No. 3 or 4, as they are less liable to wound the lining membrane. The largest size should be passed that will enter easily. The probe may the first time be left *in situ* for twenty minutes; then the sac and duct may be syringed out. It will often be found in recent cases that the probe will need but a few introductions, at intervals of two or three days, and the astringent or caustic injection will speedily remove the lingering catarrh. On the other hand, in more protracted cases the stricture will be found less yielding: it gives a grating sensation as the probe goes through it. The amount of muco-purulent secretion may be small; probe No. 3 or 4 may enter, but No. 5 not without violence. Such a case requires persevering dilatation. Advance from a smaller to a larger size must sometimes be made gradually, at other times rapidly. The probe may be introduced at intervals of one to three days, according to the sensibility of the parts, and may be left in place half an hour at a time. Even where the largest size has been reached, it should be passed a number of times at intervals of a week to prevent contraction of the stricture. There is much the same propensity to contraction in strictures of this canal as in strictures of the urethra. In fact, the philosophy of treatment in the two cases is identical. The time necessary to effect a cure is of course variable: it will be from one month to six months.

The attempt is to restore the tissues to their healthy condition; and to do it the mechanical obstacle (the stricture) must be overcome, and permanently, while the chronic inflammation of the mucous membrane is to be set aside. The mechanical treatment has a great influence in abating the chronic catarrh, because the irritating morbid secretions are thus set free. Often no other proceedings are necessary than passing the probe. Injections are needed only where there is profuse catarrhal secretion distending the lachrymal sac and irritating the conjunctiva.

A few words as to the manner of introducing probes. Each end of the instrument has a different size, and the most convenient kind has a shield soldered to the middle, upon which the numbers are stamped, and which enables the probe to be handled more readily. The sizes were originally from one to six. I have found that larger probes can be passed, and have added Nos. 7 and 8. These large sizes require the canaliculus to be divided quite up to the lachrymal sac.

In using the probe it must be curved to correspond with the configuration of the face. Simply bending it for half an inch from its tip is not enough, neither is the same curve adapted to all cases. The height of the nose and the prominence of the brow will greatly alter the depth and course of the lachrymal duct. The probe then must have a large curve, that is, it should be an arc of a circle whose radius will be shorter or longer as the case requires. The larger sizes, from 5 to 8, must be of pure silver; the smaller sizes should be alloyed to give them stiffness. It is better to stand behind the patient, with his head resting against your person: tell him to look upwards; draw the lower lid downwards and outwards with one hand, and with the other use the probe. The concave side of the probe must be kept forwards, the point carried horizontally along the divided canaliculus until, entering the lachrymal sac, it strikes against the opposite bony wall. It is sometimes difficult to get thus far—the mucous membrane of the canaliculus may be folded over the probe, or the passage may be too narrow. When this is the case the skin of the lid will be wrinkled and pushed inwards as force is applied to the instrument. To avoid folds of the mucous membrane it is well to make the point of the probe press forward as it is pushed along. If the passage be too narrow, it must be cut with the knife, or a smaller size taken. If the point strike the inner wall of the lachrymal sac (and this will be recognised by its solid resistance), it should be held fixed while the other end is brought to the vertical position. When this change is made, and not until then, should the probe be pushed downwards. If it has been properly curved, it will not press against the brow in going down, nor meet any resistance except from the stricture. But if the probe be too straight, it presses painfully against the eyebrow, the point scrapes the mucous membrane of the nasal duct, and there will be great risk of making a false passage. In pushing the probe downwards its point should be directed a little outwards towards the ala nasi. In following these rules strictly, as to direction and shape of the probe, considerable force may be safely employed, but no violent efforts should be made. If one probe will not pass readily, try a smaller size. When the probe is fully down the shield comes opposite the eyebrow, and the probe points to the ala nasi. If the upper end pitches forwards, or the direction deviates from the above, a false passage has been made. This begins usually at the top of the nasal duct, and is made outside of the superior maxillary bone, under the tissues of the cheek. Fortunately, no serious harm is thus inflicted, if the mistake be not persisted in: the wound will heal in a few days, and the attempt may be repeated. Ecchymosis of the lid or cheek often betrays this error.

The intermittent dilatation by probes must be persevered in for weeks and months—the intervals becoming longer as the tendency to relapse diminishes. Very satisfactory results are thus obtained. Patients sometimes get tired of repeated probing, and when they have been on the point of giving up treatment in disgust I have resorted to another method of accomplishing dilatation of the stricture. I have taken a piece of lead wire of the same size as the probe which can be passed, rounded one end to make it smooth, and pushed this into the nasal duct; the upper end is bent at an acute angle, and hangs over the edge of the lower lid. This I have left *in situ* for one day or three days, and in one case for three weeks, without producing irritation of the eye. The stricture was kept dilated, and the epiphora ceased. I should not employ this method except on patients whom you can see at any time; but a few trials of it have given me a favorable impression of its value in shortening the duration of treatment and in making the dilatation more permanent.

This process of dilatation sometimes needs to be continued with astringent applications to the mucous lining of the sac, by a fine syringe, or by collyria dropped into the eye. More frequently such treatment is needless; the catarrhal inflammation abates, *pari passu*, as the obstruction yields.

Phlegmonous inflammation and abscess may take place either with or without stricture of the duct. When first it threatens it may be aborted by applying two to four leeches over the sac, and by the assiduous use of iced compresses. If suppuration cannot be avoided, employ warm fomentations, and make an incision into the sac as early as possible. I would urge the importance of an early opening; if no pus appears, the tension of the tissues is relieved, and the bleeding is serviceable: when suppuration shall take place it will not undermine the skin, as it is prone to do when left to its own course. Be not stinted in the size of your incision, and aim to penetrate the sac. The best mode of doing the operation is to stand behind the patient, who will be on his back or sit in a low chair, and use a straight bistoury. Put the point as nearly over the middle of the tendo oculi as the swelling will enable you to judge, holding the handle perpendicular to the plane of the face and turned a little outwards; thrust the point quickly backwards, so as to strike the lachrymal bone, and immediately carry it downwards and outwards. If the patient's head suddenly starts up as the knife enters, his movement makes the cut larger and aids your purpose.

An abscess which opens by ulceration, or which has been too sparingly incised, is apt to fill up again, and require repeated incision. Sometimes it will linger along in this way for two or three months. It is then apt to degenerate into fistula lachrymalis. Fistula is not so likely to occur when an abscess is opened early and sufficiently. The cutaneous orifice of a fistula may be concealed by a thin layer of cuticle, or it may be pouting with fungous granulations. It may in time cicatrize, and contract to a capillary opening. The course of the fistula is sometimes crooked, but there is generally no difficulty in passing a probe through it into the lachrymal sac. If the fistula be recent, it may be closed by cauterizing it once in two or three days with a pointed crayon of nitrate of silver. Such are made by Squibb. But if the fistula be old, and in every doubtful case, there must first be an exploration of the nasal duct and lachrymal sac to decide upon their condition. If their calibre and lining membrane are or may be made normal, then try to close the fistula. If there be a stricture, dilate it with probes *per vias naturales*, slitting up the canaliculus: do not attempt to dilate stricture through the fistula. But if the nasal duct be the seat of an unconquerable stricture, or be closed by ossific growth; if the lachrymal sac be enormously dilated, and its mucous lining have become a mere pyogenic membrane; if there be caries of the adjacent bones; if fistula have lasted a long time; or if a patient cannot spare the time which may be needful to restore the passages to a healthy state—another proceeding must be adopted. This is the obliteration of the lachrymal sac and upper portion of the nasal duct. Tavignot adopts the obliteration of the canaliculi alone, but I do not deem this sufficient, certainly not in bad cases. This proceeding was in use a hundred years ago—it is described by St. Yves. In late years it has been revived by Desmarres, and it is now very generally adopted. But you will ask me—If you totally occlude the sac and duct, what will become of the tears? Will not epiphora be more distressing than ever? Bear in mind that you have an incurable disease of the passages; they are in a state of perpetual inflammation; they keep up chronic conjunctivitis, and reflect irritation upon the lachrymal gland. Hence there is a constant hypersecretion of tears, as well as obstruction to their natural escape.

If you destroy the inflamed lachrymal mucous membrane, and shut up the cavity which is the seat of disease, you remove the cause which provokes chronic conjunctivitis and excessive lachrymal secretion. Soon the conjunctiva recovers a healthy state, and tears cease to flow more than to meet the physiological demand. The fluid for moistening the eye is ordinarily supplied by the conjunctiva, and a slight excess is evaporated. When in the house, or where nothing irritates the eye, a patient is entirely comfortable; but when exposed to wind or dust, and tears flow more freely, they must stand in the conjunctival sac, or overflow the cheek. In the latter case a patient with obliterated lachrymal sac suffers inconvenience. But this is admitting, what is true of a multitude of surgical operations: they do not restore the perfect performance of function, they only mitigate an evil. Resected joints are not so good as healthy joints, but they are far better than anchylosis.

But you will ask—Why not insert a style? Simply because a style answers no better purpose than does occlusion of the sac. It is a foreign body, an unsightly object, and an annoying thing to wear.

Dupuytren's tubes are far worse than styles: they become impacted in the nasal duct, and by causing absorption of adjacent bony walls they sometimes travel far out of their intended place, and often provoke serious suppuration. They are utterly out of use. A similar but less amount of mischief attaches to the style as being a foreign body, while obliteration of the sac and duct accomplishes at least all that the style can.

Another objection may be made, in the supposed deformity which such an operation must cause. A scar is left at the inner angle of the eye, which is sometimes sunken, but is always linear, and is never conspicuous. I have done the operation upon the lachrymal sacs of a young lady of seventeen years, without at all marring the beauty of her fair face.

The mucous membrane of the lachrymal passages may be destroyed in a variety of ways. The most elegant method is by the galvano-caustic—but the apparatus is expensive, and very liable to get out of order. The actual cautery is used more frequently than any other proceeding; then a variety of potential cauteries are used, such as nitric acid, caustic potash, butter of antimony, chloride of zinc, and nitrate of silver. In the Infirmary we resort usually to the hot iron. The cauteries are of various shapes, bulbous or pointed, and one is bent at an obtuse angle within two inches of the point, to enable it to be thrust down into the nasal duct without burning the skin of the brow. It also has a bulb for retaining its heat. The irons are heated most conveniently in a dentist's furnace lamp. They should not have more than a very dull red heat; it is better that they should not be at all red, than be too hot.

It is always necessary to use an anæsthetic, and for this operation I prefer sulphuric ether. The sac is laid freely open from its uppermost part across the tendon of the orbicularis, down a little distance upon the cheek. The incision must be at least an inch long, and its lower end curve outwards a little. When the sac is fully exposed, wait for the bleeding to stop—ice may be applied to save time. The operation is much delayed by the copious bleeding which always occurs from capillary vessels; I have attempted to check it by persulphate of iron, but was more embarrassed by the coagula than if I had not used it. It is better to trust to ice and pressure and spontaneous coagulation. When the wound is dry, have it stretched open by retractors. These may be sharp hooks to catch the skin, or leaden spatulæ. It is well to use one leaden spatula which will at the same time cover the eyeball from harm.

The cauteries are applied carefully to the whole of the sac, and to as much of the nasal duct as can be reached, until the mucous membrane is well blackened. It is also well to introduce a fine cautery into the canaliculi, but is not always necessary.

Sometimes the reaction from the operation is smart. I have seen acute conjunctivitis and chemosis follow; there will always be considerable swelling of the lids. But generally the inflammatory reaction is moderate. Compresses dipped in iced water are the proper dressing.

The cauterization may not have been thorough, and a small fistulous opening will, after three or four weeks, remain. Unless the cavity is totally obliterated, the operation will be fruitless. If there should be a remaining pocket, a bit of solid nitrate of silver may be pushed into it and left there. This will usually suffice.

The heated iron produces less reaction than nitric acid or caustic potash; it can be more carefully managed, and it is not so liable to cause superficial necrosis of the bony walls. But in private practice the actual cautery would be looked upon with horror, and you may have to employ nitric acid or potassa fusa.

Even solid nitrate of silver is said to be adequate: a piece is put into the sac, and left to dissolve. After a week or two another piece is thrust in, and this is repeated until occlusion is obtained.

You need not be alarmed if the bony walls should be denuded, and superficial necrosis occur. The healing will be protracted, but I have never seen serious ill effects result.

The time required for a cure by the actual cautery is about four weeks. I can only repeat that the operation affords great relief, that it has in almost all cases been gratifying to myself, and that, while some objections to it are unfounded, those which do lie against it are such as may be urged against many well established surgical operations.

One remark remains to be added. In young children you are often unable to employ operative treatment—probes and occlusion of the sac are out of the question. You may effect much by giving them cod-liver oil, iodide of potassium, by using astringent collyria, and by invigorating the general health in every practicable way.

Adults are sometimes averse to operative interference. You can alleviate the annoyance of their complaint by showing them how to empty the distended sac and avoid irritating the eye. Teach them to press with their fingers or handkerchief upon the lachrymal sac, and absorb the fluid which regurgitates by simple pressure, without rubbing the eyelids. Friction of the eyelids is very irritating, while gentle pressure empties the sac, dries the eye, and gives relief. It is important to keep the sac empty—accumulation of muco-pus aggravates the inflammation and irritates the conjunctiva.

Statistics of the Globe.—The following curious facts are stated by the *Abeille Medicale*:—The earth is inhabited by 1,288 millions of inhabitants, viz. 369,000,000 of the Caucasian race; 552,000,000 of the Mongolian race; 190,000,000 of the Ethiopian; 1,000,000 of the American Indian; and 200,000,000 of the Malay races. All these respectively speak 3,064 languages and profess 1,000 different religions. The amount of deaths per annum is 333,333,333, or 91,954 per day, 3,730 per hour, 60 per minute, or one per second. This loss is compensated by an equal number of births. The average duration of life throughout the globe is 33 years. One-fourth of its population dies before the seventh year, and one-half before the seventeenth. Out of 10,000 persons only one reaches his 100th year; only one in 500 his 80th; and one in 100 his 65th.

Original Communications.

A SHORT ACCOUNT OF THE "MARY ANN" HOSPITAL,

GRAND GULF, MISS.,

WITH A BRIEF DESCRIPTION OF SIXTEEN CASES OF AMPUTATIONS TREATED IN THAT HOSPITAL.

By JAMES BRYAN, M.D.,

SURGEON U.S.V., IN CHARGE.

This institution was organized by the introduction of patients from the field after the battles at Grand Gulf, Port Gibson, and the vicinity, from the first to the fifteenth of May, 1863. It was almost entirely a field hospital, located on the slope of a prominent bluff occupied as a peach orchard. The buildings consisted of a central dwelling and several outhouses, formerly used as kitchens and quarters for the negroes. Its exposure was southwest, and though subjected to the intense rays of the sun, the heat was much mollified by a continual breeze from the river, especially at night. The population of the institution during my administration was from eight hundred to one thousand persons; the nurses were partly enlisted men, and partly female contrabands. The other attendants were composed about equally of each of these classes. The medical staff was as follows:—James Bryan, Surgeon U.S.V. in charge; T. A. Worrall, Surgeon U.S.V.; —— Van Brunt, A. Surg. U.S.V.; J. M. Cowan, A.S. 77th Ill. Vols.; L. Dyer, A.A.S.; H. H. Littlefield, A.A.S.; Chas. A. Edgar, A.A.S.; Chas. Miller, A.A.S.; Thomas Spann, A.A.S.; Thomas C. Cox, Med. Cadet.

The medical and commissary supplies of the hospital were far from being abundant, the latter, however, pretty well made up by our foraging parties. Fresh beef particularly was in abundance.

The patients were drawn exclusively from western and south-western regiments, and were fine specimens of muscular young men. The best water for drinking purposes which we could obtain was from the river, which was very muddy, and sometimes fetid. The spring water of the vicinity (and there were no wells) was sulphurous, and contained salts which produced diarrhœa and pain in the bowels as soon as used. The residents of the neighborhood were uniform in declaring the danger in using this water. The cisterns of the vicinity were most of them spoiled, so that our supplies of water were exceedingly meagre. Among our patients we daily found a large increase of contrabands, who crowded to the post in great numbers, so that it was necessary to establish a hospital expressly for their treatment. On the second of June we received orders from the commander of the post, Col. Geo. E. Bryant, of the 12th Wisconsin Vols., to remove the whole hospital up to Young's Point or Milliken's Bend. On the third the whole "chebang" was removed on board the "Forest Queen," and started for Young's Point. We will not speak of the transportation in army wagons of these poor sick men, over a corduroy road, three miles long, through a hot sun, etc., etc., which were the results of military necessity, as we were surrounded by the booming of cannon and explosion of shells all the time.

The following are a few of the cases which happened in this hospital:—

Case I.—*Amputation of the Right Shoulder-Joint.*—Eli Baker, private, Co. G, 19th Kentucky, a farmer. This was a gunshot wound of the upper part of the arm, shattering the humerus. The amputation was at the shoulder-joint, and had been performed nearly after the manner of Larrey, with an anterior V-flap, embracing the deltoid muscle. The wound had healed in large proportion by the first intention, the operation having been performed on the first of May, the day of the battle of Port Gibson. The patient is doing well, the ligatures having been all removed. The last was taken away on the twenty-fifth day after the amputation. Age of patient, 21 years.

Case II.—*Amputation of the Left Arm near the Shoulder-Joint.*—G. Stryker, private, Co. G, 42d Ohio Vols. This was performed on the same day as the last, the wound having been received in the same battle. At the present writing, thirty-four days after the operation, the condition of the patient is as follows:—the operation was by double flap, and the bone sawed off about an inch below the tuberosities of the os humeri. The wound has now entirely healed, the last ligature having been removed on the twenty-third day. The surfaces united almost entirely by the first intention. The patient was apparently a young farmer, 21 years of age, and in good physical condition.

Case III.—*Amputation of Right Arm, Lower Third.*—Levi H. Keplinger, corporal, Co. E, 42d Ohio Vols., by occupation a harness-maker. The operation was by double flap (a very long flap). The present condition of the wound is as follows:—It has entirely healed; last ligature taken away about the twenty-eighth day; the wound healed in a great measure by the first intention; physical condition good. In this case the flap was unusually long, and had to be supported by mechanical apparatus, on account of the dragging weight upon the end of the bone. The patient will probably, sooner or later, apply for another operation, to remove the excess of tissue which now incommodes him.

Case IV.—*Amputation of Right Arm, Middle Third.*—Joseph Andrews, private, Co. K, 42 Ohio Vols. This wound was dressed as the others were, with simple cerate, adhesive straps, and rollers kept wet continually with cold water. The ligatures have all come away, and the wound has entirely healed, and the patient is in good condition.

Case V.—*Amputation of Left Arm, Upper Third.*—A. C. Bragg, private, 2d Ohio Battery. Not much is known about this patient. He came to us on the twelfth inst., from the Grant Hospital, with his wound in a bad condition, and his general health impaired. It was immediately dressed with simple cerate and adhesive straps, with rollers, and with cold water. On the thirteenth the wound was carefully cleansed and re-dressed, the application of cold water being continued, as was the general practice in the hospital in all such cases. On the fourteenth the wound was again dressed, and the patient being in a sinking condition was placed upon tonics and stimulants. On the fifteenth the stump became rapidly gangrenous, and at eight o'clock P.M. the patient died. The heat of the weather was intense, and great difficulty was found in guarding this and many other cases from the intrusion of the ova of flies. To remedy this difficulty, some of our larger and more open wounds were dressed with cold tar-water, the results of which will be mentioned in another place.

Case VI.—*Amputation of Upper Third of Right Arm.*—Adam Gandy, corporal, Co. K, 46th Ind. Vols. This was a case of gunshot wound of the lower third of the arm; the operation was by double flap, and primary. This patient came from Grant Hospital, and was treated in the usual way. During the progress of the case the sutures, on account of the inequality of the flaps, had given way, and left the wound open; the posterior flap being much the largest, a good deal of difficulty was experienced in bringing the lips together; this, in fact, could not be done, the posterior hanging an inch and a half below the anterior one. The wound has nearly healed up, by granulation chiefly, and the last ligature came away on the thirty-second day; a slight purulent discharge continues; patient doing well.

Case VII.—*Amputation of Upper Third of Left Arm—Secondary.*—John Van Keuren, sergeant, Co. H, 21st Iowa. This patient entered the hospital on the 12th of May from the Grant Hospital. The patient stated that a round ball had struck his arm about three inches above the condyle, fracturing the bone, and leaving one or two comminuted pieces with the bullet itself still in the wound. An incision had been made, the bullet and pieces of bone removed, the lips of the wound closed by adhesive strips, the arm placed upon a pillow, and the injury dressed with cold water. The strong peculiarity in the case, when first seen by us, was the excessive pronation of the forearm and elbow; the patient could not bear to have it changed. To meet this and a slight shortening of the arm which existed, splints were applied as in ordinary fracture. The patient, however, removed these, and the arm returned to its former position. The swelling and infiltration continued to increase from day to day, and it was resolved in consultation to amputate the arm. This was done on the 31st of May, by double flap operation. It was performed by Dr. Littlefield. Before the administration of chloroform, which is the common practice in this hospital, from one to two ounces of brandy were given, and the same dose repeated after the operation. The surgeons found the tissues more infiltrated than was expected, making it necessary to diminish the under flap by excision. The general health and spirits of the patient are good, and we hope for the best.

On examining the arm after amputation we found that the extraordinary extent of pronation was due to the direction of the surfaces of the fragments, upper and lower, the obliquity being due to the loss of one or more pieces of the point struck by the ball.

Case VIII.—*Amputation of Upper Third of Right Arm.*—Henry E. Stewart, corporal, Co. K, 46th Indiana Vols. Admitted May 3d. As far as we can learn this patient did well.

Case IX.—*Amputation of Middle Third of Right Arm.*—Wilson Lester, private, Co. I, 69th Indiana Vols. Admitted May 12th. Dressed in the usual manner, and patient did well.

Case X.—*Amputation of Upper Third of Left Arm.*—Peter Young, private, Co. A, 19th Kentucky Vols. This patient entered our hospital on the 7th with a gunshot wound of the elbow-joint. The condyles of the os humeri, as was found after the operation, were denuded of periosteum, and the olecranon process broken into fragments. No splints had been applied when he entered the hospital. The arm was placed upon a pillow, and dressed with cold-water dressing from the 7th to the 29th of May. During this period several pieces of bone were extracted from the wound, which appeared to be pieces of the olecranon process. On the 29th, the arm not improving, and the weather being very warm, it was resolved to amputate, which was done by double lateral flap, by Dr. Lewis Dyer, assisted by the rest of our medical staff. On the 6th of June the wound was healing nicely, and the patient was sent to hospital at Milliken's Bend.

Case XI.—*Amputation of Right Forearm, three inches above the Wrist.*—E. B. Cox, private, Co. K, 69th Indiana Vols. Admitted May 12th. The operation was primary, and by double flap. The stump in this case took on inflammation once or twice, without much tendency to suppuration. The last ligature came away about the twenty-fifth day, after which the wound healed slowly. The application of resinous cerate was found useful. The patient's age and a strong tendency to intermittent fever made the use of tonics and anti-periodics necessary; quinine and Dover's powder were freely used, and the patient finally did tolerably well. Of course he is no longer fit for the service.

Case XII.—*Amputation of Upper Third of Right Thigh; Double Flap; Operation Primary.*—Jason L. James, corporal, Co. C, 18th Indiana. Previous history, as in most of the other cases, but little known. The case was treated with adhesive strips, rollers, cold water, sometimes with simple cerate or ol. olivæ, and sometimes with cold tar-water as an antiseptic and prophylactic against the ova and larvæ of the fly. Nothing noteworthy occurred with this patient during his connexion with the hospital, a period of three weeks, except that reparation was almost entirely by granulation, and even this was not a peculiarity distinguishing it from other cases of amputation, as the restorative process in almost every case was by new formation, whether of the superior or inferior extremities. The patient when sent up the river was in a fair way to recover.

Case XIII.—*Amputation Right Thigh Upper Third—Circular—Secondary.*—Henry C. Davis, private, Co. I, 46th Ind. This was a case of gunshot wound above the knee, fracturing the femur, and injuring the arteria profunda. Secondary hæmorrhage occurred from this artery on the tenth day after the reception of the wound. The patient was mentally and physically debilitated. The operation was performed at three P.M., May 10th, by Dr. L. Dyer. Stimulants and chloroform were resorted to as usual, and the form of operation was circular. The stump was dressed by interrupted sutures, adhesive strips, and roller, with the continued use of cold water. On the 15th, the patient exhibiting increased debility, stimulants and tonics were resorted to. On the 17th, a small arterial branch in an uninclosed portion of the wound poured out a little blood, which was promptly arrested by the application of a small ligature. The patient, however, continued to sink until four o'clock A.M. of the 18th, when he died. There were found, on examination of the stump, no signs of reparation, but, on the contrary, a great deal of sloughing.

Case XIV.—*Amputation Left Thigh, Upper Third—Double Flap—Secondary.*—Geo. M. Nottingham, private, Co. I, 56th Ohio. This patient had received a bullet in the popliteal region of the left thigh. The wound originally did not seem to involve either the artery or the bone. Cold-water dressings were applied until the 20th, at half-past two P.M., when profuse hæmorrhage supervened from the popliteal artery. Judging the condition of the patient and the artery to be such as to render ligation unsafe, it was decided on consultation to amputate at the upper third. The operation by double flap was performed by Dr. L. Dyer at three P.M., stimulants and chloroform having been first administered. May 21st.—The patient passed a comfortable night, but being considerably debilitated he was put upon quinine, acid. sulph. aromat. and morphia. 22.—Cold-water dressing and other treatment continued. 23.—Suppuration commenced; citric acid and tonics. 24.—Re-dressed with roller and cold water; continued acid and tonic. 25.—Symptoms favorable; reapplied adhesive straps and roller; continue quinine and acid. 26.—No particular change. 27.—Rigors, empyema; stump looks rather favorable, however; milk punch and tonics administered freely. 28.—Rigors, sinking; parts flabby and rapidly becoming gangrenous; tonics, stimulants, and opium administered. 29.—Pulse small and frequent, with much debility; flaps purple, and at nine P.M. death closed the scene.

Case XV.—*Amputation Upper Third, Right Leg—Double Flap—Secondary.*—Henry Taylor, sergeant, Co. B, 30th Ill. On the 2d inst., before daylight, this patient, while on duty, stepped off a high bank, fracturing the tibia and fibula at the lower third of the right leg. Was admitted to the hospital on the twelfth of May, when his condition was as follows: Fractured extremities not in apposition, but projecting through the original wound, enlarged after the accident to place them *in situ*. The bones were denuded of periosteum to the extent of an inch or more. Purulent matter mixed with grumous blood had collected in considerable quantity. The patient stated that hæmorrhage had already given much trouble. The bones were adjusted, and the limb placed in a sling under cold water drippings.

At twelve o'clock on the night of the fourteenth, hæmorrhage occurred from the anterior tibial artery, which was controlled by ligature. The case not improving, but on the contrary assuming a sloughing aspect, it was resolved on consultation to amputate at the upper third of the leg. The operation was performed by Dr. L. Dyer (double flap), on the eighteenth, at five P.M. Brandy and chloroform administered. The patient was, generally speaking, in good condition, and in excellent spirits. This case progressed ordinarily well under a sustaining course of treatment, with citric acid and anodynes, with a few local applications of cold tar-water to the wound, until the 30th; when an irritative fever supervened with profuse suppuration, and an ulcerative process in the upper flap began to expose the corner of the divided fibula; these unfavorable symptoms, however, soon yielded in part, granulations of a healthy character began to form, and the case, when last seen, gave every promise of recovery.

Case XVI.—*Amputation Middle Left Leg—Primary Double Flap.*—Charles Rehl, corporal, Co. E, 21st Iowa. This patient was admitted on the tenth, having been wounded on the first; he was treated meanwhile, but of the treatment no record could be obtained. When admitted, the soft parts were in a sloughing condition, with no signs of reunion; suppuration profuse and exceedingly unhealthy; the wound was also infested with almost innumerable larvæ; debility very considerable. The wound was carefully cleansed, and a weak solution of cupri sulph. injected; gentle compression was made by rollers, and cold tar-water applied. Tonics, milk punch, and anodynes administered. This case progressed without improvement or anything peculiar, until the 20th, when the patient died.

We present the above cases without comment, hoping that the facts, as presented, will tend to improve our practice in "amputations."

Reports of Societies.

NEW YORK COUNTY MEDICAL SOCIETY.

Stated Meeting, May 4, 1863.

ALFRED UNDERHILL, M.D., PRESIDENT, IN THE CHAIR.

(*Continued from vol.* vi., *page* 307.)

TREATMENT FOR THE PEYERIAN LESION.

Dr. E. R. Peaslee remarked that if it be true, as Dr. Lee has suggested, that arsenious acid modified the progress of typhoid fever, he believed it exerts this influence not in the manner specified by him, but because, like quinine, it is in some way an antidote to the fever poison itself. In regard to the general treatment of continued fevers, Dr. P. said that his ideas might be very briefly formularized. But when we come to actual cases, we must constantly modify it to suit the particular case under consideration. The following general propositions would be the basis of his practice:—

1st. Continued fever is a self-limited disease, its duration being incapable of any essential abridgment by treatment.

2d. It is due to the presence of a poison which must be neutralized or eliminated before recovery can occur.

3d. Therefore the treatment should consist:—

A. In giving the patient the best chance to eliminate the poison by removing all obstacles to this process, by receiving perfect ventilation of the apartment, cleanliness of the same, and of the person of the patient, by quiet of body and mind, a comfortable temperature, and by proper diet.

B. Administer an antidote to the poison, if any is known; and Dr. P. believes that quinine and the various preparations of cinchona bark act partly in this way.

C. Prescribe such other remedies as will aid the action of the agents just mentioned, as diaphoretics, diuretics, laxatives, soporifics, and stimulants if required, and as required.

But when we come to treat given cases, we will find the indications under the last head to vary exceedingly, though the points under the other two are never to be disregarded.

Dr. P. has had cases of typhoid fever in which he did not resort to medication at all, except as indicated under the two first heads above, *i.e.* hygienic management, and some preparation of cinchona. All have seen those cases of "walking typhoid," as they are sometimes called; and in most of these no other treatment is required than just mentioned. In them, also, only mischief results from active medication of any kind.

In regard to the use of stimulants in continued fever (as that in the point now under consideration), Dr. P. remarked that he should be influenced by the condition of each particular case. In some cases no stimulant is required during the whole course of the disease, while in others stimulation is demanded from its very outset. In military practice we very often see cases in which fever ensues after an exhausting march, requiring stimulants from their first development. How, then, are we to decide whether stimulation is required in any particular case? Those who have had extensive experience easily decide this point to their own satisfaction. But nothing has as yet been said this evening which would enable a young practitioner to settle this question. Dr. P. would say, then, that stimulation is required in all cases in which subsultus is present; but we desire to anticipate this symptom, if possible. Further, then, Dr. P. should say, stimulants are indicated in cases in which debility is the leading symptom, as shown by the enfeebled and often shrill voice, by marked inability to move if roused; where there is duskiness of the surface, independent of deep pulmonary complications; and especially by a small and feeble and not very frequent pulse. If with these symptoms we give the stimulant while the tongue is still moist, and not much darkened on its dorsum, so much the better; for if we delay it will soon be black and dry, and perhaps cracked, and then stimulation even may be of no avail. These, then, would be to Dr. P. the symptoms demanding the use of stimulants. The next question is—What stimulant shall be selected, and how much shall be given? Dr. P. always has preferred the best brandy, if procurable; if not, then Bourbon whiskey. Some patients, however, have a great aversion to any alcoholic stimulant except wine, in which case champagne is usually very grateful, and to be preferred, though the genuine port is valuable also.

In regard to the amount of stimulant required, Dr. P. thought the effect on the pulse is the best criterion. If that becomes fuller without being increased much above the normal frequency, while the skin also remains moist, and the tongue is not much drier, and especially if quietude and even sleep is induced, the stimulant cannot fail of benefiting the patient: we must then remain and observe the effects of the stimulant, or appoint a competent assistant to do this; and if so, we will find that while a drachm of brandy once in one or two hours will be just enough in some cases, an ounce every hour will be too little in others.

DELIRIUM TREMENS FROM EXCESSIVE STIMULATION.

In regard to the danger of excessive stimulating treatment in continued fevers, Dr. P. held a very decided opinion. Stimulants are quite too powerful agents to be used otherwise than cautiously. He remembered an illustrative anecdote of the late Dr. Nathan Smith, founder of the Medical Department of Yale College. Dr. Smith was called a long distance to visit a case of typhoid fever in consultation with two attending physicians, the patient presenting certain anomalous symptoms which gave the latter gentlemen great anxiety. After an examination of the case, Dr. Smith told the physicians that he would watch with the patient till morning, when he would meet them again. On returning, they were quite astonished to witness the patient's amendment, which Dr. Smith explained by the following remark, "I found your patient drunk; he is now sober, and if you keep him so, you will have very little more to do for him, but to let him get well."

Dr. P. had not seldom seen delirium and dryness of tongue with irritation of the stomach, produced by too free a use of stimulants, and had no doubt that a persistence in such a use of them might have proved fatal.

Reference was made to Dr. Finnell's statement, where that gentleman had seen symptoms like those of delirium tremens occur during the convalescement of a patient to whom stimulants had been freely administered. Dr. P.

had no doubt such symptoms might be thus produced. If they might occur after a debauch of two or three days in a strong man in health, surely they might in one debilitated by a typhus or typhoid, though a less amount were taken in the aggregate.

The discussion has been confined principally to the use of stimulants in continued fevers, but Dr. P. remarked, they must be constantly "*backed up*" by appropriate nutriments, either separately or in combination with them. In the latter category, he mentioned milk punch, egg-nog, and wine whey. The best article of all he thinks, for nourishment, is beef-tea, made according to Liebig's formula; next, broths of various kinds, and if there be diarrhœa, milk porridge. Gruel, made of Indian meal, he thought almost always does decided harm by fermentation in the alimentary canal, and, in fact, he regards it as a general preparation, nourishment perhaps fit for swine, but not for the human organism.

Dr. P. would give cathartics in continued fevers either at their outset or during their course, if required to improve the condition of the alimentary canal in reference to digestion, or absorption of aliment, but for no other object. He would, however, remark on these and other classes of remedies when they came under consideration in their time.

Dr. Benjamin Drake remarked that he listened to the discussion with much satisfaction, and at that late hour would claim the attention of the Society but for a few moments. He was surprised that among the stimulants recommended, but little mention of champagne wine had been made. In his perhaps limited experience, it had proved of very great value, combining, in addition to its alcoholic properties, all the advantages of carbonic acid gas, and the nutritive constituents of saccharine material. It would seem to be peculiarly appropriate Besides, it is in most cases peculiarly acceptable to the patient, and whenever it can be procured, it is not only efficient but very desirable.

UNITED STATES ARMY MEDICAL AND SURGICAL SOCIETY, OF BALTIMORE.

Stated Meeting, March 5, 1863.

(*Concluded from vol. vi., page 295.*)

SURGEON C. C. COX, U.S.V., PRESIDENT, IN THE CHAIR.

[Reported by Dr. Geo. H. Dare, Acting Asst. Surg., U.S.A., Secretary.]

Dr. Dare gave the statistics of twenty-six cases of gunshot wounds of the thoracic cavity penetrating the lungs, treated at the U.S. Army General Hospital, Camden street, Baltimore.

Character of Missiles.—Eighteen round balls, seven minié, one grape shot.

Location of Wounds.—Twelve of right lung, fourteen of left; twelve were in the upper, eleven in the middle, three in the lower part of the chest; twenty-four balls passed out, two remained in. All spat blood at some period except three.

Result.—Eight died, eighteen were discharged.

Of the fatal cases five were wounded in the upper, two in the middle, and one in the lower portion of the lung.

Most of the twenty-six cases were in very bad condition when admitted; bleeding was out of the question. Nutritious diet, tonics, and stimulants, were freely administered. While free suppuration was going on the orifices were kept open.

Wounds of the pericardium penetrating the heart were, as a rule, immediately fatal; occasionally the patient survived for hours, days, or even weeks. Cicatrization had been observed after death from other causes, which seemed to indicate recovery after a wound of the heart.

WOUNDS OF THE ABDOMINAL CAVITY.

A wound of the diaphragm was indicated by the course of the ball, singultus, dyspnœa, etc. It was said by Guthrie never to heal, and that after death, long after the injury, protrusion through the opening of a portion of the stomach or bowels had been observed. The contents of the abdominal cavity might be fatally injured by a spent cannon-ball without a solution of continuity of the soft parts. Dr. Dare had been told by an old physician, that he had known the abdominal aorta to be ruptured by a kick in the abdomen, inflicted with a man's boot. The doctor made an autopsy, there was no aneurism. The symptoms of a wound of the intestine were, the passage of blood by the rectum, and of fæces through the wound: but in many cases it was difficult or impossible to tell at once whether the intestine was wounded or not.

The wound of the intestine, if accessible, and more than a few lines in extent, should be sewed up with the Glover's suture, and the bowel returned. The bowels should be kept confined, and only fluid aliments given for a week or ten days. If inflammation supervene, leeches and warm fomentations should be used. Wounds of the liver, kidneys, and bladder, were usually fatal. In a wound of the bladder the great indication was to keep in a catheter, in order that the urine might flow through its natural channel.

E. G. Waters, A. A. Surg. U.S.A., gave the particulars of several cases of wounds of the lungs, included in the statistics given of Camden street Hospital. In one the ball entered the left breast above the nipple and passed through; the patient spat blood four weeks, but recovered. In another the orifice remained open five months, during which time the man went about and occasionally got drunk.

Dr. W. reported a case of recovery after a wound of the abdominal cavity perforating the intestine. The ball entered two inches above the umbilicus, passed directly through and emerged about three inches from the spine. According to the patient's account, feculent matter passed through the posterior orifice, and on one occasion some blackberries which he had recently eaten. The man was much emaciated when admitted; the orifices had healed, but the posterior subsequently reopened, and matter, feculent beyond doubt, was discharged. The man recovered after awhile, and left the hospital in excellent health.

Dr. W. thought that bleeding from the arm might, in some cases, have a tendency to arrest pulmonic hæmorrhage; but that, in anticipation of long continued suppuration, it was not advisable to lower the power of the system by loss of blood, in the attempt to prevent or subdue inflammation.

Surg. Bliss, U.S. Vols., remarked that it was sometimes extremely difficult to diagnose a wound of the lung, and cited several cases in which men spat up blood after wounds which did not penetrate the thoracic cavity. For the shock and prostration after a wound of the chest, Dr. Bliss advised brandy and opium in combination. He corroborated Dr. Waters's objections to bloodletting, and stated that he had never seen it practised on the field. After punctured fractures of the cranium Dr. B. recommended the early use of the trephine, whether there were symptoms of brain trouble or not.

A. A. Woodhull, Assist. Surg. U.S. Army, related the case of a friend who was shot through the cavity of the knee-joint. Dr. Rodgers, in order, as he stated, to prevent inflammation of the joint, ligated the femoral artery. The result seemed to justify this novel mode of treatment; the officer recovered with some stiffness of the joint and contraction of the flexor muscles.

Jas. H. Boone, A. A. Surg. U.S. Army, stated that he had treated seven of the twenty-six cases of gunshot wounds of the lung, statistics of which had been given. In one case a minié ball passed through the middle lobe of the right lung, fracturing the scapula. The patient spat blood at first. Air passed freely in and out of both orifices. When admitted he was much emaciated; there was free purulent discharge from the wound. As an experiment, Dr. Boone stopped up, as closely as possible, both orifices. Air ceased to be respired. The man spat up for a few days about as much pus as had previously been discharged from the orifices. He commenced to improve, and in course of time left the hospital apparently well. All of the cases were treated with tonics and stimulants. Five lived, and left the hospital. Five died of traumatic pneumonia.

American Medical Times.

SATURDAY, JULY 4, 1863.

CALOMEL AND TARTAR EMETIC AS REMEDIAL AGENTS.

SURGEON-GENERAL'S OFFICE,
WASHINGTON CITY, June 12, 1863.

DEAR SIR:—Desiring to obtain the opinions of the more eminent members of the Medical Profession relative to the indiscriminate use of Calomel and Tartarized Antimony, I have the honor to request that you will answer the following questions:

1st. To what extent do you prescribe Calomel and Tartar Emetic in your practice?

2d. Do you regard these agents as indispensable in the treatment of disease?

3d. In view of the facts that a large number of the Medical Officers of the Army are young and inexperienced, and that soldiers cannot in the field be placed beyond the influence of atmospheric vicissitudes and exposure whilst undergoing medical treatment, would you recommend that the medicines in question be issued to Army Medical Officers, except, as at present, upon special requisition?

4th. Do you or do you not think that more harm than good has resulted from the use of Calomel and Tartar Emetic as medicines?

It should be stated that the following mercurials are at present on the Supply Table, viz:

Hydrargyri chloridum corrosivum; Hydrargyri iodidum flavum; Hydrargyri oxidum rubrum; Hydrargyri pilulæ; Hydrargyri unguentum; Hydrargyri nitratis unguentum; Pilulæ catharticæ compositæ; and that it is provided by paragraph 13, of Circular No. 7. dated Surgeon-General's Office, May 7, 1863, which contains the Supply Table, and which refers to the manner of obtaining medical supplies, that "it is not the design of the Department to confine Medical Officers absolutely to that table, either in variety or quantity, but only to establish a standard for their guidance in making requisitions for supplies, leaving individual preferences to be indulged at the discretion of the Medical-Director or the Surgeon-General. Neither is it supposed that the quantities of the table will always meet the necessities of unusual emergencies, as during epidemics, or in unhealthy seasons and localities; and Medical Officers who allow their supplies to be exhausted through any such contingencies. without timely notice of their approaching necessities, will be held to a strict accountability."

I am, sir, very respectfully,
Your obedient servant,
WILLIAM A. HAMMOND,
Surgeon-General U.S.A.

IN a recent number we gave our reasons for approving the order of the SURGEON-GENERAL striking calomel and tartar emetic from the Medical Supply Table of the Army. Our conclusions were based upon the information which had induced the order, communicated by the medical inspectors, upon an extended personal observation in military hospitals, and on inquiry among some of the most eminent army surgeons. The order appeared not only expedient but judicious, and, under the circumstances, necessary. It could not justly be construed as an attempt to control the practice of the discreet surgeon, but simply prevented an existing abuse. The diseases among soldiers for which mercurials are specifics may be treated as efficiently as formerly, for the army surgeon still has among his medical stores several forms of mercury which will accomplish his purpose equally well. Calomel has the disadvantage of being used so frequently in simple diseases as a common remedy, that constitutional effects occur, often unexpectedly to the physician, especially in debilitated patients. By removing this agent, therefore, and still leaving other mercurial preparations as well adapted to specific purposes, but less liable to be used, except when the practitioner is desirous of producing specific results, less harm must obviously attend the use of mercurials. Such, we do not doubt, will be the effect of this order. No evil can result to the sick soldier from the absence of calomel from the list of remedies, however much he may need mercurialization, when such preparations as blue pill, bichloride and iodide of mercury, etc., remain. But in prescribing these latter remedies the practitioner generally has a very definite idea of the object he wishes to attain, which is not always the case in the use of calomel. Even if the SURGEON-GENERAL has committed an error in issuing this order, it appears that no harm can come of it, as calomel and tartar emetic may still be obtained on special requisition. This fact should be thoroughly understood by all medical directors, as well as the medical staff.

In the circular which heads this article the SURGEON-GENERAL seeks information from eminent members of the medical profession, relative to the indiscriminate use of calomel and tartarized antimony. The queries proposed open the widest possible field for the discussion of the therapeutical uses of two of the most popular remedies of the materia medica. If, as it would appear, this circular is designed to elicit from eminent medical men opinions which will or will not sustain the recent order, it should have been issued before that order was promulgated. This might have obviated much of the ill-feeling which the order has excited. If it is designed simply to raise a scientific question in the profession as to the propriety of using these remedies in the treatment of diseases, the result may be anticipated. The verdict of the vast majority of the practitioners in civil life will be emphatically expressed in favor of these remedies. But we are not disposed to regard this as a question which eminent civil physicians can discuss so as to aid in its proper solution. It is purely a military subject. The real point at issue is embraced in the third question, and no one can answer that intelligently who is not practically familiar with the diseases of soldiers, and the modifying circumstances which surround them. Upon the answers of the surgeons of the army to these inquiries we shall rely, and not upon those elicited from civil practitioners, whatever may be their eminence. We hope the circular will be responded to by all the leading army surgeons, and all the medical inspectors.

THE WEEK.

DR. T. GAILLARD THOMAS has lately been appointed Adjunct Professor of Obstetrics to the College of Physicians and Surgeons of this city. The choice of the Trustees is an exceedingly good one. Dr. Thomas is a gentleman of acknowledged ability in his department, and has long enjoyed the reputation of being a very successful teacher. We learn that PROF. BEDFORD has resigned the Chair of Midwifery in the University Medical College, which he has filled with so much ability since the first organization of the school. His successor has not been appointed. PROF. WOLCOTT GIBBS has been chosen to fill the RUMFORD PROFESSORSHIP, Harvard College, Mass.

WE regret the being obliged to issue the index of the last volume in the first number of the present. The occurrence is owing to the loss of the manuscript when too late to be replaced.

INDUCTION OF PREMATURE LABOR.—Professor Giordano tells us that the best method of inducing premature labor is cauterisation of the neck of the womb with lunar caustic. This, he says, excels all other methods.

Original Lectures.

LECTURES ON NEW REMEDIES AND THEIR THERAPEUTICAL APPLICATIONS.

DELIVERED AT THE
NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL.

By SAMUEL R. PERCY, M.D.,

PROFESSOR OF MATERIA MEDICA AND THERAPEUTICS.

LECTURE X.

ON THE USE OF VERATRUM VIRIDE AS A MEANS OF ARRIVING AT A CORRECT DIAGNOSIS IN DISEASES OF THE HEART AND LUNGS.

Gentlemen:—I purpose to-day to relate to you the symptoms I found present in a case of disease of the heart. I will then give you the treatment I adopted for their amelioration, and, as far as time will permit, explain to you the action of the remedy used, and how by this action a clear and correct diagnosis could be determined, when previous to this administration of the remedy it was almost impossible to arrive at an accurate diagnosis.

James Cunningham, æt. 40, a day-laborer. About four years ago he had acute rheumatism: since then he has complained of impeded and difficult respiration, accompanied with more or less palpitation. These symptoms have increased in severity, until at present he is hardly able to move. The first inspection of this man's face gives one a thrill of pain, for intense suffering is so plainly imprinted upon it: the eyes have a wild and anxious look, the mouth is partly opened, the nostrils are dilated; and these and other marked alterations from the aspect of the features while at rest, are all produced by one necessity, that of better respiration. In a word, we have dyspnœa. If we stop to count the breathing, we find he has from forty-seven to fifty respirations in a minute, and we see that this dyspnœa differs greatly in character from the dyspnœa of asthma or pneumonia; it is rather of a gasping, strangling character. The throat and chest are bare, the arms are rested and poised so as to give the muscles of the chest every opportunity to perform their functions. As you watch him you see that he makes no effort at motion, or rather that he tries to avoid making the slightest effort, for fear that it will increase his dyspnœa; that he even avoids speaking, and looks to others to answer questions for him. Sick as this man looks and feels, he is not in bed, but is seated in a large arm-chair, with his feet upon a pillow, and we learn upon inquiry that he has not lain down, or hardly been out of that chair for a week, and that during that time he has scarcely slept for a minute; that although intensely sleepy, the minute his eyes close in sleep he awakes with a sudden start, and a gasp as if suffocation were imminent. As we sit quietly watching him for a few moments, we see a drowsiness gradually creeping over him, we see his eyelids close, and for a moment or two we can fancy his breathing easier, and he looks as though he might sleep, but in an instant he starts and gasps for breath, and again that look of the horror of suffocation overspreads his face.

We see, then, that in addition to dyspnœa, or difficulty of breathing, he has *orthopnœa*, an inability to assume a recumbent posture during sleep without producing a struggle for breath.

Let us now attend to the state of the pulse. The moment the finger is applied to his radial artery we find the pulse is a most peculiar one. Instead of the steady beat we find in health, we here have what is usually called a jerking or leaping pulse. It feels as though the impetus given had not been completed, and as two or three fingers are spread over any of the larger arteries, there is a serpentine, wriggling sensation conveyed to them, and this sensation, which may be felt, may be plainly seen, if any of the arteries, either large or small, be closely watched, and it will then be noticed that the arteries have assumed a very tortuous appearance. The bowels are costive, the urine is secreted in small quantities, and it is of a dark red color, containing large quantities of purpurate of ammonia. There is a dry, teasing, irritative cough. The feet and legs are much swollen, and we learn that the swelling has much increased within the last few days, and that it has progressed upwards. What do all these symptoms tell us? To a junior student they explain little of the cause of the disease, but to one of experience every symptom is full of information! The peculiar, serpentine, wriggling pulse, that I have described, is always indicative of one peculiar disease of the heart, and wherever you find this pulse you may safely pronounce that there is regurgitation—aortic regurgitation. How shall we prove this to be the fact in this individual case? You will say that auscultation and percussion will plainly settle this point! As with difficulty we get the man into such a position as to listen to the heart, we are struck with the tumultuous amalgamation of sounds and murmurs, and with the closest intensity and nicest perception we are utterly unable to state positively what we do hear. With a rapid respiration of fifty in the minute, and a pulsation too fast to count, how is it possible to arrive at anything like a correct diagnosis? We plainly hear an unnatural murmur, but it is utterly impossible to define its character, or tell with which sound of the heart it occurs.

It is precisely in this state of disease that the medicine that I have mentioned, veratrum viride, is of such inestimable value to us, not only in ameliorating the symptoms, but in enabling us to arrive at a correct diagnosis. As this man is in a critical condition, and as the medicine we propose giving him is a powerful sedative, it will be necessary to give it with caution, and watch the state of the pulse from hour to hour. I will commence with a dose of three minims of the concentrated tincture, the formula for which I will give you hereafter. Upon returning in an hour, although the pulse cannot be counted, it is evidently more regular than before, the respirations are now forty-two in the minute, and the patient thinks he feels a little easier. We now give him two minims every hour for three successive hours, when we see him again. The pulse can now be counted 132 beats in the minute, but it requires great attention, or you readily lose the count; the respiration is certainly much easier, and is thirty-seven in the minute. The man says he is already easier than he has been for a week, but he dares not trust himself to sleep for fear of the orthopnœal paroxysm. Leaving him now in the care of an intelligent friend, we shall not see him again till morning. As we see him at ten A.M., eighteen hours since the administration of the first dose of veratrum viride, we find a very marked change. We learn that he took two minims every hour until midnight; he then felt a little nausea; and he has taken two minims every two hours since midnight. The pulse has gradually decreased in frequency, being now about ninety in the minute, and the respirations thirty-one. Since midnight he has slept at intervals of fifteen to twenty minutes at a time, and wakes up with a struggle. He has also stood on his feet several times to have his cushion shaken up; the urine has been passed in much larger quantity. I now direct that four minims of the tincture, combined with one-eighth of a grain of sulphate of morphia, be given him at ten, eleven, and twelve o'clock, and I will see him again before one o'clock. You will find, as you use veratrum viride more frequently, that you will occasionally need to give it in full doses without inducing nausea, and with this object in view you will combine it with morphia. The morphia again has another adjuvant action: it lessens the number of respirations when given in combination with veratrum more readily than either remedy will do alone. And now, at one o'clock, in what state do we find our patient? He still sits erect in the chair, but his head has fallen back, and he is sound asleep;

the respirations are only twenty-two in the minute, and the irregular pulse, taking an average of three minutes, beats only fifty-five in the minute. Let us now gently awaken him, and examine the state of his heart and lungs by auscultation. We now find a very marked difference from the tumultuous sounds heard at our last examination, for as then all was indistinct and confused, now every sound and murmur can be distinctly appreciated with the greatest ease. There is no difficulty for the youngest student to now readily study and comprehend every normal and abnormal sound. We find upon percussion that there is marked hypertrophy of the heart, and that this hypertrophy is general, and has caused a downward subsidence of the organ, and, as is common with dyspnœa from other causes, there is a descent and flattening of the diaphragm. We find upon further examination that the severe dyspnœa has caused lung inflation or distension, and that the border of the lung overlaps the heart, which is another cause of downward subsidence. We now plainly hear a distinct murmur and regurgitation following the incomplete closure of the aortic valves, and as the movements of the heart, and the respirations also, are now slow, this imperfect closure of the valves, with the sudden and jerky flow of blood into a partially collapsed aorta, and subsequent regurgitation of blood into the ventricle, with the damming back of the whole current of the circulation, are plainly audible. A murmur is distinctly heard in the carotids, and the serpentine, wriggling movement, of which I have before spoken, can be most easily seen and felt in the arteries that approach the surface. I must not be too minute in my description of pathological conditions, but confine myself to my proper sphere—the action of medicines. But I must give a brief description of the result of the treatment in this case. You will remember that previous to the administration of the veratrum we could hear but little by listening to the lungs. Now we plainly distinguish that the dyspnœa which exists is not dependent upon want of air supplied to the lungs, but on want of proper circulation within the pulmonary vessels. We spoke of an irritating dry cough. The cough still continues, but not so incessantly as when we first noticed it; and it is not now dry, but there is quite free expectoration of viscid mucus; there is no pus with it, and the complete absence of pus alone is a strong symptom to assure us that no inflammatory action of the lungs was the cause of the dyspnœa, but mere passive congestion caused by sluggishness of the circulating fluid. The kidneys now have secreted very large quantities of fluid, and it is of a brighter yellow color. This is not because we have given diuretics, but owing to the relief we have given to the circulation, for previously the slow and imperfect passage of blood through the kidneys prevented the draining off of the proper quantity of water, partly because of the non-renewal of fresh blood to the kidneys in sufficient quantity to part with its water, and partly because the heart and lungs had not sufficiently metamorphosed or vitalized the blood to present it to the kidneys in quality to be eliminated.

We find our patient much relieved in all his symptoms. The dyspnœa is much relieved; the orthopnœa for the present has left him; the cough is less frequent, and if you watch him, you see that it now scarcely troubles him if he does cough; the urine is free in quantity; he can move, and complains of feeling hungry; and all this relief has been brought about in twenty-one hours by the administration of thirty-seven minims of my concentrated tincture of veratrum viride! Now, how has this small quantity of medicine produced this amelioration? We have frequently before explained to you that veratrum viride is the best arterial sedative that we possess; that when judiciously administered it regulates the action of the heart, and brings it to its normal standard. It lessens the irritability of the whole vascular system, and causes the blood to flow more readily and quietly. It does this not only by its action upon the heart, but, as we have demonstrated, by its action on the blood-vessels and upon the blood itself. Its sedative action upon the blood-vessels I have demonstrated in many instances, and I have witnessed a marked change in the character of the blood during the action of this remedy. These peculiar changes in the action of the heart and blood-vessels, and the alteration in the character of the blood, by veratrum viride, I must leave till another lecture. The action we notice in the case I have related is, a gradual subsidence in the rapidity of the circulation, and, consequently, a great relief from the oppressive dyspnœa. As the circulation becomes more quiet, we plainly notice a more thorough contraction of the aortic valves, and, although we have not in any way cured the organic lesion, we have to a very marked extent relieved the functional disturbance. And not only have we relieved our patient from intense suffering, but (whereas when we first saw him it was utterly impossible by auscultation or percussion to form any diagnosis as to the extent or character of his disease) we can now, while he is under the influence of our remedy, form a clear, accurate, and correct diagnosis, without difficulty and without danger.

I have, since 1856, been in the habit of preparing every patient, whose heart or lungs I have wished to examine, with small and proper doses of veratrum viride, and by this means I have been enabled to arrive at a clear and certain diagnosis of cases of incipient phthisis, pleuritis, pneumonia, diseases of the heart, etc., that I could not clearly diagnose without the previous preparation of the patient with this remedy, owing to functional disturbances or other exciting causes. There are many persons who are examined for these diseases where it is almost impossible to arrive at any correct diagnosis in the early stages of disease, at which time *only* treatment can be expected to be of much avail, owing to even slight functional disturbances, which completely mask or render obscure the signs that without the disturbing causes would be readily recognised. Now veratrum viride quiets these functional disturbances, lessens the rapidity of the circulation, tranquillizes the respiration, and thus so moderates these functions that the mind can readily define and arrange the sounds that are communicated to the ear. I give you this new means of diagnosis as the results of my own investigations. I am not aware that it has ever been practised, except by those to whom I have communicated it. I need not impress upon you its vast importance, for by means of this practice you may always know what you are treating, and you will find that that is no slight gain in your ability to inform your patient of what he may expect from your treatment. This new means of diagnosis will be of inestimable value to the Life Insurance Companies in all cases of doubtful diseases of the chest.

But let me in a few words finish what I have to say on the treatment of the patient before us, and I must leave further discussion of the interesting subject matter before us to another lecture.

As soon as our patient had entirely overcome all feelings of nausea, half a grain of elaterium was administered to him. It produced a large watery evacuation, and greatly relieved the œdematous condition of the legs. By small doses of veratrum viride, cautiously administered whenever dyspnœa became troublesome, by the administration of half a grain of elaterium every third day, and by the use of the vegetable tonics, and a nutritious, but carefully watched diet, our patient is out and about his ordinary occupation, but he has to be very careful, or the orthopnœal struggles prevent him from sleeping at night. He will probably die suddenly. I have merely related this case as a means of interesting you in the new method of diagnosis I have proposed to you. It was more easy for me to bring it before you in this way.

Of the concentrated tincture of which I have spoken, I have found that which is usually sold in the drug stores under the name of Norwood's Tincture, of very uncertain strength, scarcely ever being alike in two different stores, and I think a great deal of the want of uniformity complained of with this remedy, is owing to the imperfect manner in which the tincture I have spoken of is made. From the many experiments I have performed I have found that the medicinal principle of the root is contained in the resin. To obviate all difficulties of the uncertainty of strength, I have prepared the tincture I have been in the habit of using, after the following formula, and have always found it uniform in strength.

CONCENTRATED TINCTURE OF VERATRUM VIRIDE.

Any quantity of well selected root is coarsely powdered, and treated with alcohol 86°, by percolation, the alcohol is distilled off, and the residuum evaporated to an extract over a water-bath until it is nearly dry, or until it ceases to become lighter upon being weighed at intervals of an hour or two. To make the tincture, one part of this extract is dissolved in ten parts of alcohol at 86°, and filtered.

Any good pharmaceutist can prepare this tincture, but if any of you wish to use it immediately, either the tincture or the extract can be obtained from Mr. Faber, Sixth Avenue, corner of Thirty-eighth street.

This tincture is nearly double the strength of that called Norwood's, and the medium dose is about two minims. I also use the pure resinoid, and a tincture prepared from it, of which I will speak at another time.

Original Communications.

MECHANISM AND TREATMENT OF LABORS
WITH BROW AND FOREHEAD PRESENTATIONS.

By JOSEPH MARTIN, M.D.,
OF NEW YORK.

The manner in which a brow presentation is produced was not understood before the time of Baudelocque. He first advanced the opinion that a presentation of the face is always preceded by that of the brow. And since then systematic writers on midwifery have considered the premature separation of the chin from the breast, at the beginning of labor, as the origin of these malpositions of the fœtal head.

Murphy tells us that the difficulty in a brow presentation is slight, and can be easily removed; but that, "when the forehead descends into the cavity of the pelvis, and becomes the presenting part, the position is so unfavorable that the head will be arrested, and by a continuance of pain it will be completely wedged." He does not, however, explain satisfactorily how the head becomes arrested and wedged. Tyler Smith states that, "in semi-extension of the chin the brow presentation exists;" and that "it is among the most difficult of cranial presentations." He also states that, "when the chin is separated as far as possible from the chest, there will be a face presentation;" but admits that "the manner in which such positions of the head are brought about is somewhat obscure." Professor Simpson says, "When the head is not sufficiently flexed, the momentum of the action of the uterus is received upon the middle or fore part of the forehead, and not upon the occiput. The mechanism of the labor thus comes to be perverted, and delay and danger may follow."

I will confine myself, at present, to these authors. But it can be easily shown, by reference to other writers on midwifery, that no definite opinion is entertained by the profession as to the exact nature of these malpositions; nor as to the cause of the difficulty when the fœtal head becomes wedged, or impacted, as it is called. Consequently, the modes of practice generally recommended, in such labors, are vague and unsatisfactory.

Baudelocque recommends—"pushing up the forehead, during pains, or drawing down the occiput by the hand or one blade of the forceps, or turning when the whole head can be pushed back, and, when that cannot be done, the use of the forceps or crotchet."

Dr. Dewees adopted the same methods of treatment; but preferred pressure upon the head in the absence of pain. F. H. Ramsbotham's mode of treating such labors is—"A steady pressure upon the brow until the power of the uterine forces brings down the back of the head; or rotation of the head by means of several fingers." Professor Simpson says, "There are but three alternatives in such a case, that is, rectification by raising the forehead; or the application of the vectis over the occiput, to bring it down; or rotation by the forceps; or forcible extraction by the same instrument."

These various methods of practice, all of which are recommended by writers generally, except the depression of the occiput, adopted by Simpson and a few other modern accoucheurs, show that there is no uniform treatment of such labors, based upon a knowledge of their true mechanism, recognised by the profession. Hence the following question, put by the elder Ramsbotham, in relation to a labor of this description, is of vital significance. He asks, "Suppose, on watching the case, we find no advantage gained, no alteration in the position of the head, no advance from hour to hour, what then is to be done?"

As to pressure with the fingers upon the forehead, or other parts of the fœtal head, for the purpose of changing the presentation, it is evident that the fingers cannot carry the chin far enough back towards the breast, except in a very few cases, to enable the uterine power to force the short arm of the cranial lever below the brim of the pelvis. Next, in relation to version when the head is wedged in the pelvis, even if it can be pushed back, the well known danger of the operation to mother and child, under the most favorable circumstances, ought to preclude its adoption. *The use of the forceps in such a labor is totally inadmissible.* For at this point of the process, as will be presently shown, the long diameter of the head is applied to the superior strait of the pelvis, and traction with instruments will only increase the difficulty. As to craniotomy, it is only a last resort, after unfailing efforts to deliver, together with useless delay, have caused the death of the child.

Now, the only rational method by which we can decide upon the proper treatment in this and other difficulties in cranial labors, is to ascertain, by careful observation at the bedside, the exact nature of the various positions of the fœtal head, and the manner in which it is acted upon by the uterine power, from the beginning to the termination of the process. For the mechanism of a labor truly indicates the practice necessary for a favorable result. What, then, are the facts observed in this description of labor? There is always an abnormal separation of the chin from the breast of the child; the occiput is, therefore, more or less flexed upon the nape of the neck instead of being fully extended as in natural labor, and the power of the uterus, acting in the direction of its longitudinal axis, is transmitted through the cervical vertebræ and cranium to the brow, and it becomes the presenting part at the superior strait. The labor pains now force the brow into the pelvis, because the chin is not sufficiently extended to constitute a face presentation; and every additional pain drives the head, still in that position, down into the pelvic cavity, until it is obstructed.

Up to this point all authorities agree as to the mechanism of labors with forehead presentations. But in relation to the cause of the arrest, and the subsequent impaction of wedging, I have searched in vain *for any satisfactory explanation.* We must, therefore, observe the operations of nature in order to solve the difficulty As the semi; extended chin, which is the terminus of the long arm of the cranial lever, cannot pass into the pelvis, it is the part of the head first arrested by the brim, and lodged above it, where it is pressed downwards, and fixed by the circular muscular fibres of the uterus at that point. It then becomes the fulcrum of the lever, upon which the head turns as the uterine power impels the short or occipital arm towards the pelvic cavity, into which the forehead, the bregma, and the posterior fontanelle, in succession, are forced, until the process is checked by the occiput, that now also rests upon the brim; beyond which it cannot be driven by any number of labor-pains, nor by any amount of artificial force, because the long diameter of the head, the mento-occipital, is applied to the superior pelvic opening. Such are the results of my observations.

The forehead is now the presenting part. The anterior fontanelle is felt low down, and the posterior opening can be reached by following the sagittal suture upwards; on the other side of the pelvis, the brow, the mouth, and every other part of the face, except the chin, can be traced. Still there is ample space for two fingers, when carried nearly to the brim, to sweep around the head. And it may be remarked, that this peculiarity constitutes the difference between a wedged and an impacted head, and *is the diagnostic sign of labors with forehead presentations.* For in face presentations, as in vertex cases, the head, almost uniformly, passes through the superior strait before it is arrested, when, in consequence of its large size, uterine inertia, or resistance of the soft parts, it becomes stationary, filling the cavity of the pelvis, and leaving no space for a single finger.

This occasion may also be taken to state that the word presentation is not confined in this paper to its technical meaning, that is, to designate the part of the fœtal head that presents itself at the superior strait, but indicates the point first touched by the examining finger, at any period of the process. For, as is shown above, in forehead presentations, almost the entire face can be felt by means of two fingers. This is an important fact, because there is good reason to believe that it has led to much confusion in descriptions given of such labors, and not a little discrepancy of opinion as to their proper treatment. And it can be shown, by reference to recorded cases, that on more than one occasion the use of the forceps, and even craniotomy, has been resorted to, when a knowledge of the true mechanism of such labors would have pointed unerringly to a more simple and safer operation.

If the above be a correct description of the mechanism of labors with forehead presentations, the proper treatment is obvious; that is, the conversion of the malposition into either a vertex or a face presentation, which, according to my experience, can be readily accomplished. The former, by introducing the hand, or by means of the vectis, or one blade of the forceps, and bringing down the occiput, when there will be a vertex presentation; the latter, when circumstances are favorable, by dislodging the chin from above the brim of the pelvis, in the absence of pain, by means of the fingers, when the face will present, and the labor will progress with the usual results. And one or the other of these simple operations can be resorted to with promptness, and with safety to mother and child, according to the circumstances attending the labor, either when the brow simply presents, or after the head has become wedged, whatever may have been the delay, and whether the child be living or not. Every other mode of treatment is either unavailing, or dangerous to mothers, and, in most cases, fatal to infants.

I have shown in my paper on "Face Presentations," that even after the fully extended chin has entered the pelvis, the occiput can be brought down, and the labor converted into a vertex presentation; and there can, therefore, be no difficulty in performing the operation when the chin is above the brim. And the following case, while it illustrates the manner in which brow and forehead presentations are produced, will show, that after the head becomes wedged in the pelvis, the face can easily be made to present, when the labor will terminate favorably.

On the 26th of July, 1862, I was requested by Dr. William J. Newman, of this city, to see a patient of his, Mrs. H., aged thirty-two years, in labor with her sixth child. All her previous labors had been unusually rapid, terminating generally in less than an hour. When I arrived she had experienced very severe labor pains for upwards of three hours, and the head of the child had been arrested for more than one hour. The Doctor considered the labor facial. On examination per vaginam, I found that the forehead presented, and was far down in the pelvic cavity. The chin was in relation with the left acetabulum, and the occiput was at the right sacro-iliac synchondrosis; the left mento-iliac position. The pelvis was ample, the os uteri fully dilated, and all the soft parts completely relaxed. The anterior fontanelle was low down, and the posterior could be reached by following the sagittal suture upwards; the mouth, and every other part of the face, except the end of the chin, could be traced by the middle finger, and there was sufficient space to move the two fingers around that part of the head which was below the brim.

Here was a plain case of forehead presentation, with a wedged head, and the occiput and chin resting above the brim at the termini of the right oblique diameter of the pelvis. The recognition of this position of the fœtal head enabled me to decide at once, that there was a choice of one of two operations, by either of which the labor could be readily and favorably terminated. I could introduce the hand, pass it up at the right sacro-iliac synchondrosis, curve the fingers over the occiput, bring it down, and turn it forward to the foramen ovale, when the child would be born with the vertex presenting; or, I could dislodge the chin from above the brim, when the labor would be changed to a face presentation. As the pelvis was large, the head of the child comparatively small, the os open, and the other soft parts relaxed, the labor pains being severe and in quick succession, I concluded to adopt the latter, as the more simple and ready mode of treatment. Two fingers of the right hand were then passed over the right side of the head, during a pain, to the angle of the lower maxillary; and at the close of the pain, when the head slightly receded, the point of the middle finger was slipped, with some pressure downwards, along the edge of the bone towards the left acetabulum, when, upon the recurrence of a pain, the chin glided below the brim; and in less than twenty minutes from the time I entered the room the child was born with the face presenting.

The only peculiarity about the face was a distortion of the right corner of the mouth, which was pressed downwards and backwards; and, in connexion with it, there was a well marked depression in the edge of the bone at the right angle of the chin. This was the part of the fœtal head which was first arrested by the brim, and pressed down upon it by the labor-pains, after the lodgment of the occiput on the other side of the pelvis. And it shows that, in consequence of the usual obliquity of the head when it is about to enter the superior strait, the side of the chin, and not its anterior part, rested above the brim. Hence the great amount of force it can resist from labor-pains, or traction with the forceps. The mother of the child informs me, that "the deformity of the mouth continued for several days, and the black color lasted much longer."

The only case that I have seen published in which the fœtal head was injured by wedging, consequent upon a forehead presentation, as there is reason to believe, is related by Cazeaux, in a note, page 442, Paris edit., 1856. He calls it a face presentation (mento-iliaeque gauche transversalis), in which the membranes had been ruptured nine hours before he was summoned, during which time the forceps had been applied. Three-quarters of an hour after his arrival the labor terminated spontaneously. The child was soon reanimated. "But," he adds, "on examination of its head I detected, in the vicinity of the posterior fontanelle, small splinters of bone which crepitated under the finger; and on its dorsal side, there was an evident trace of a depression, distinctly marked."

Cazeaux believes that this injury was done after the chin was engaged under the pubes, in consequence of "forcible pressure upon the posterior part of the thorax, flexing it upon itself, which transmitted the uterine power directly upon the occiput." But it is evident that such an injury could not be inflicted by labor-pains, acting in that manner. And delivery, without additional aid, could scarcely have taken place after the failure of the forceps, applied when the chin was low down in the pelvis. If, however, the head was wedged in the manner described above, which I believe was the case, traction with the forceps would have caused just such a depression and fracture of the bone, without advancing the labor ; and then spontaneous dislodgment and additional extension of the chin would be likely to result in delivery.

GUNSHOT WOUND OF THE GREAT TROCHANTER.

EXSECTION OF HEAD OF FEMUR—GRATIFYING RESULT FROM THE USE OF DRAINAGE TUBES.

By DAVID P. SMITH, Surgeon, U.S.V.,

IN CHARGE OF GENERAL HOSPITAL, FAIRFAX SEMINARY, VA.,

Joseph Brown, Co. I, 3d Michigan, was shot through the left great trochanter on the 29th August, 1862, at the second battle of Bull Run. He lay three days on the field, was then taken to Centreville, and finally brought to Fairfax Seminary General Hospital, Va., on the 11th of September.

It being deemed best to attempt to save the limb, he was treated in obedience to that view, the limb being placed in a suitable splint, and as much nourishment being got down as possible. I twice removed fragments of dead bone from both the wound of entrance and exit, and his improvement was so great that about the end of February he began to think of going home. Early in March, however, the limb began to swell immoderately, he lost his appetite, his pulse became small and frequent, and the discharge from the wound, although scanty, became extremely fœtid. Under these circumstances I deemed it best to attempt relief by operation. Accordingly, on the 21st of March, having first made a large exploratory incision, and discovered much disease, I extended it at both ends, so that it reached from about three inches above the trochanter, down on the outside, and along the axis of the limb, for about eight inches. So much new bone had been deposited about the seat of the fracture that, on beginning to dissect up the soft tissues from the tip of the great trochanter downwards, much embarrassment was experienced from the greatly increased diameter of the bone. By the handle of the knife, and the fingers, the new bone and periosteum producing it was peeled off and pried away from the necrosed portions. Just below the trochanter the bone was but loosely agglomerated, and came away in large fragments in the grasp of forceps. With large and powerful cutting forceps the femur was squarely divided at from five to six inches below the tip of the trochanter major. A screw driven into the softened pudding-stone (bone) failed to hold, and the part to be excised was manageable only with necrosis forceps. The neck was found so much diseased that I proceeded to remove the head from the acetabulum, which was happily accomplished with but very trifling hæmorrhage.

The portion excised will be sent to the Surg.-General's Office, furnishing, as it does, an impressive example of how much disease may exist after a gunshot wound, with but trifling manifestations of mischief, for, in this instance, nearly seven months.

He was rallied with difficulty from the shock of the operation.

After the lapse of about forty-eight hours an erysipelatous blush appeared over the whole thigh, and typhoid symptoms began to manifest themselves. I then pushed a female catheter into the wound, directing it towards the acetabulum. A jet of very offensive decomposing bloody serum issued through the catheter to the amount of four ounces. I retained the catheter in the wound, and introduced another one two or three inches below, so as to drain off all effusion; much serum and grumous blood poured out, oozing from the cut surfaces, and trickling through the catheters. On the fifth day after the operation he had a severe rigor, which gave rise to grave apprehensions, but the discharge through the catheters soon told that it was caused by hæmorrhage to the extent of four to six ounces. He soon rallied from this. I often washed out the cavity by injections of warm water and solutions of chloride of soda. The catheters often became clogged up, which as often necessitated their removal, cleansing, and re-introduction. For a day or two at first the limb lay on a pillow: I then applied Prof. N. R. Smith's anterior splint; but that, admirable in all other respects, preventing access to the front of the limb for the purpose of rubbing, I then contrived a species of hammock for the limb, hung from a beam overhead. The miniature hammock for the leg hung horizontally, but in order to effectually prevent any burrowing of pus, I hung it so high that the thigh was almost perpendicular. To support the thigh I passed a bit of soft towelling around the under surface of it, broad enough to extend from the perineum to the popliteal space, and suspended by cords leading back to an upright behind the bed at an angle of thirty-three degrees with the horizon. This latter support so equally pressed upon the under surface and two sides of the thigh, as to relieve the man immediately of all uneasiness, and cause a continual oozing from the wound and dropping from the catheters of pus, serum, and synovia. About seven days after the operation suppuration was fully established.

An unlimited amount of nourishment was afforded this man from the moment the nausea and vomiting induced by the chloroform had passed away. Ten or twelve eggs each day, with an unlimited amount of strong beef-tea, and half an ounce of brandy every two hours, were given him. In connexion with this case, I wish to remark, that my experience in all branches of the service has driven me to the conclusion, that it is not the fault of Government or of the Surgeon-General, if the sick and wounded in the army do not receive every comfort, every care, every attention. I must say that I have found that proper supplies, proper food, suitable clothing, and good nursing, are always obtainable by the surgeon for his sick and wounded. Careless and incompetent men will always probably exist, and contrive to creep into subordinate positions in every department, but the atmosphere for them in the medical corps of the army is so uncongenial that they soon drop or *are dropped* out. I make these remarks, because I have observed with pain the remarks of some surgeons who, from a want of experience, meeting with minor difficulties, and perhaps missing in the Supply Table some medicines used only by a few practitioners, think themselves justified in indulging in puerile complaints. Deeming it of the utmost importance that there should be, in the case of this man, no hindrance to digestion and assimilation that could be avoided, on the second day after the operation I discontinued the use of opium, which he had used nearly all of the time since his wound was received. This I did, of course, by rapidly diminishing the dose of the opiate, not dropping it at once.

The above is an extract from my monthly report for the month of March. During April, Brown continued to improve. I gave him porter with large quantities of cod-liver oil part of the time, half a pint of the latter daily. I was obliged to keep in drainage tubes until the first of June. Whenever I removed them, as I did several times to try to do without them, pus would accumulate and burrow. When I removed the last one on the 1st of June, I passed a mesh of suture wire through the fistulous opening still remaining. This was retained until the 20th inst. The wounds, both of the operation and the original wound, are now entirely healed. The man is about on crutches. Of how much use this limb will be to him it is now too early to decide : I make no comments on the case, because I desire only to report its occurrence, and recommend the use of drainage tubes in all similar excisions, and indeed in all compound comminuted gunshot fractures where there is much muscular tissue. Pus will not always readily flow, even from most dependent wounds.

U.S. Army Gen'l Hospital, Fairfax Seminary, Va.
June 26, 1863.

Reports of Hospitals.

U.S. GENERAL HOSPITAL, ANNAPOLIS, MD.

COMPOUND GUNSHOT FRACTURE OF THE FEMUR, TREATED WITH SMITH'S ANTERIOR SPLINT.

By B. B. MILES,
ACTING ASSISTANT SURGEON U.S.A.,

I.—*Fractures of the Neck of the Femur, caused by a Musket-ball.*—Bough, age over 30 years, was wounded in the battle of Williamsburgh; after remaining on the field for some time, he was carried to the rear, and simple dressing of cold water was applied to the wounded thigh. The patient states that the amount of hæmorrhage was small, and the shock to his constitution was very great, with sharp stinging pain in the thigh. He also states that it was impossible to sleep on account of the pain. Five days afterwards I received him from a government transport. On examination, a bullet wound was discovered in the right groin, below and external to the superior spinous process, and a posterior wound was discovered in the buttock. The bullet was presumed by him to be a round ball. On making the usual measurement from the anterior superior spinous process to the ilium, and to the inner condyle of the femur, there was found no shortening, but crepitus was distinct. On passing a probe in at the anterior opening, fracture could be felt. The limb was swung in Smith's anterior splint. The suppuration was copious, yet healthy in color and consistency. He had now no difficulty in sleeping, nor did I find it necessary to give him a narcotic. He remained in the splint over two months, treated with cold-water dressing, to the great relief and comfort of the patient. By measurement of the limb, it was found that the shortening amounted to one inch and a half. The general health of the patient has improved rapidly, and convalescence was not interrupted by a single accident. He returned home cured. It has been the opinion of the surgeons of Europe, and among them Mr. Guthrie is the most prominent, that no person has been known to survive for any length of time a fracture of the neck of the femur.

I know of a lady, aged sixty years, who fell on a sleety-day, fracturing the neck of the femur. She recovered with shortening of one inch and a quarter. She was alive two years after the accident, and walking without the assistance of a cane. Treated on the anterior splint.

II.—Ruff, Penn. Vol., aged 45, native of Ireland, was wounded in the seven days' fight by a round ball, as he supposed. The musket-ball struck the anterior aspect of the right thigh, passing on, fracturing and comminuting the right femur, and finally passing out nearly opposite on the posterior surface of the thigh. The fracture of the femur was at the junction of the middle and upper third of the bone. The patient states that the amount of hæmorrhage was small, and the shock very slight, he only experienced a sharp pain in the thigh. He was carried off the field immediately or after the firing had slackened, and was obliged to remain unattended until the following morning. His wound was dressed with cold-water dressing, and then he was put upon a government transport, where he lay for some thirty-six hours, not even water being applied to his wounds. I saw him the third day after the injury. The leg was placed in the anterior splint, and treated with cold-water dressing. The suppuration that followed was copious, but healthy in color and consistency. He remained in the splint two months before it was taken off, and then it was found that the fragments had united firmly. He was accordingly allowed to wear crutches.

During the treatment small fragments of bone from time to time came away. By accurate measurement of the limb, and comparing it with its fellow, the shortening was ascertained to be one inch and a half. The general health of the patient improved rapidly, and there was no local deformity at the point of fracture. He returned home without the use of a cane, cured.

III.—Noll, N. J. Vol., aged 20, a farmer, and of good constitution, was wounded at the battle of Antietam. He was taken prisoner and sent to Richmond; he remained there several days with little or no treatment. When admitted, his condition at that time was enfeebled by hunger, thirst, loss of blood, profuse suppuration, and fatigue of the journey. The bullet, supposed by the patient to have been a minié ball, entered the anterior surface of the left thigh at the middle, passing downwards and backwards, fracturing the bone in its lower third, and emerging posteriorly about six inches below the point of entrance. Up to this time (15 days having elapsed) no apparatus or dressing of any description had been applied to the limb. The appearance of the limb, on entering, was swollen, the anterior and superior wound looked healthy; but the lower wound was much enlarged and suppurating most profusely. You could easily introduce your finger and feel the shattered bone, but as no detached pieces presented, the limb was swung in the anterior splint, and according to his statement he has not slept for a week; but since the application of the splint he has not passed a sleepless night: cold-water dressings were applied; beef-tea, stimulants, and tonics, were necessary to support the general system. Two weeks after entering the hospital, and the 27th day after the injury, the wounds were suppurating copiously, but healthy in color and consistency; small fragments of bone came away, and he convalesced slowly. The splint was not removed for ten weeks, and then the lower wound was discharging. No deformity of the limb noticeable, and the position perfect. By accurate measurement of the limb, shortening is ascertained to be one inch and three-quarters. He was able to return home cured.

IV.—*Fracture of the Femur through the Great Trochanter, caused by a Minié Ball.*—McCave, Mass. Vol., was wounded at the battle of Antietam: after remaining on the field for some time he was carried to the rear and placed in a barn, where he remained for about two weeks. The patient states the amount of hæmorrhage was considerable, and the shock to his system was very severe. He also states it was impossible to sleep on account of the pain, and the noise of the others in suffering. The musket-ball entered the anterior aspect of the right thigh, about three inches and a half below the anterior superior spinous process, passing on, fracturing and comminuting the right trochanter, and finally passing out nearly opposite: his wounds were dressed with cold-water dressing. He was sent in an ambulance to the General Hospital at Frederick City. The transportation on a rough road irritated the parts, causing active inflammation. The suppuration that followed is described as being copious, but healthy in color and consistency. The limb was swung in the anterior splint. The wounds caused by entrance and exit of the ball healed kindly, and rendered no further annoyance. At the end of three months the dressing was removed, and it was found that the fragments had united firmly; but owing to abscesses in the axilla, he could not use his crutches. By accurate measurement of the limb, and comparing it with its fellow, it is ascertained that the shortening is not over three-quarters of an inch, and he walks about without the assistance of a cane. His general health is fast improving. During the treatment several pieces of bone were removed, and his case is one of the most promising that I have ever witnessed.

(*To be Continued.*)

The expenditure of the British Medical Council during the past year, 1862, was £4822. Its income was £4661. The excess of expenditure over income was, therefore, £160. This bad balance-sheet is attributed to the fact of £600 advanced to the *Pharmacopœia* Committee. The estimated accounts for the present year, 1863, show a balance in favor of the Medical Council.—*British Med Jour.*

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, JULY 1, 1863.

DR. JAMES ANDERSON, PRESIDENT, IN THE CHAIR.

ALCOHOLIC STIMULANTS IN PULMONARY TUBERCULOSIS.—DISCUSSION OF DR. FLINT'S PAPER.

Dr. Flint read an elaborate and interesting paper, entitled the "*Management of Pulmonary Tuberculosis, with Special Reference to the Employment of Alcoholic Stimulants.*" It consisted mainly of a clinical report, based upon sixty-two cases of arrested tuberculosis. These cases are analysed and compared as regards points of agreement relating directly and indirectly to the management, the main objects of inquiry being the evidence afforded of self-limitation, the influence of hygienic measures, the agency of remedies, and the importance of alcoholic stimulants in determining the arrest of the disease. He considers that the disease is arrested whenever the general and local symptoms show it to be non-progressive for several consecutive months. After the arrest, the recovery may or may not be complete. In many of the cases the recovery was complete, while in others a certain amount of cough and expectoration continued for a considerable period of time, in two cases for more than twenty, and in one case for forty years.

For convenience of analysis he arranges the cases in three groups. I. Those in which no curative or hygienic methods of management were employed. II. Those cases in which hygienic measures were employed. III. Cases in which remedial measures, including alcoholic stimulants, were supposed to have had a curative influence. I. In the first group seven cases are collected, of which four recovered entirely. II. The second group includes twenty cases, in twelve of which the recovery appeared to be complete, in eight the arrest of the disease was not followed by complete recovery within the period that the condition of the patients severally was known. The ages in this group ranged between nineteen and fifty years, and seventeen of these were males. In only four of the cases are there any grounds for supposing that climate had any curative influence. The most important point of agreement developed by the analysis of this group of cases relates to change of habits as regards exercise and out-door life, and the agreement in this respect is highly significant. III. The third group embraces thirty-five cases. Only one of these cases was treated with tonic remedies, exclusive of cod-liver oil and alcoholic stimulants. In four tonics were employed in conjunction with alcoholic stimulants, and in two tonic remedies were conjoined with cod-liver oil; alcoholic stimulants and cod-liver oil were employed conjunctively in eight cases. Stimulants, oil, and tonics were used in one case. The curative remedies employed were only three in number: cod-liver, alcoholic stimulants, and tonics of iron and quinine. In five of the thirty-five cases, the curative treatment consisted exclusively of cod-liver oil; in two of these the symptoms entirely ceased. Of these thirty-five cases, in fourteen the curative treatment consisted exclusively in the use of alcoholic stimulants; of these fourteen cases of arrest, in nine the recovery was apparently complete. Generous living was inculcated and adopted as far as practicable in all the cases.

The most striking and valuable of the results of the analytical study of these sixty-two cases is their almost uniform agreement as regards change of habits with respect to exercise and out-door life at the time of the arrest. Excluding the seven cases of the first class, and two in which the facts with respect to this point were not noted, of the remaining fifty-three, in all save three, the histories show a greater or less change of habits to have been made; and in many cases the change consisted in relinquishing sedentary callings for other pursuits, in order to carry out more effectually the desired reformation. Regarding the indications for the use of stimulants, Dr. Flint says:—

"If their immediate effect be that of a cordial stimulant, that is, if they produce a sense of comfort: if they are followed by a feeling of increased strength, and a greater disposition to exercise; if they do not excite unduly the circulation or nervous system, I believe we may expect benefit from their use. *Per contra*, if their immediate effect be discomfort; if they are followed by a feeling of increased weakness and less disposition to exercise, and if they excite unduly the circulation or nervous system, I believe they will not do good, and may perhaps do harm."

With respect to the formation of habits of intemperance, he remarks:—

"In not one of the cases which I have reported has there been developed, so far as I know, a craving for stimulants, or a reliance upon them, rendering it difficult to relinquish their use. I have had my attention directed particularly to this point of observation, and I have not yet found an instance in which there was any apparent reluctance to discontinue the use of alcoholic stimulants whenever it was deemed advisable. I have not yet found an instance in which their use was continued after they were declared unnecessary; in short, up to this time I am not aware that in a single case among the many cases in which I have advised alcoholic stimulants, has a patient fallen into intemperate habits. * * * I certainly am not prepared to advocate the use of alcoholic stimulants as a prophylactic; that is, to sanction indulgence among those who may believe or fancy that they are in danger of becoming tuberculous. I would not advise their use in doubtful cases; they should follow a clear diagnosis, based on signs and symptoms. In persons with the unfortunate idiosyncrasy which leads to an irresistible craving on the slightest indulgence, the immediate effects would always contraindicate their use in conformity with the rules which should govern our practice in cases of tuberculosis. And, finally, when employed as a remedy, they are not to be taken as a means of conviviality, or for any other than a curative influence."

Dr. Detmold was not able to reconcile the clinical and autopsical history of phthisis with the generally received theory as to its cause. It was claimed that the respiratory function was the one that suffered. This he could not believe, because, if there was a deficiency of oxygen admitted to the blood, digestion still remaining active, there would necessarily be a chance for the accumulation of fats. But the reverse of this was the case. Again, the most successful remedies used for phthisis were the hydrocarbons. This, to his mind, did not prove that the disease was due to any great want of oxygen.

Dr. Griscom thought that the disease depended on the lack of carbon in the blood instead of oxygen, and instanced in proof of that fact the beneficial influence of fats as remedial agents.

Dr. McCready alluded to the fact that alcohol was discharged from the body, as such, and acted beneficially only so far as it stimulated digestion and aided assimilation.

Dr. Horace Green had only employed alcohol as an adjuvant to other remedies, and therefore could only speak approximatively of its effects. Conjoined with tonics and out-door exercise, he had seen great benefit from its use.

Dr. Flint, Jr., was of the opinion that inasmuch as the process of nutrition was very much interfered with, the indications were to bring that process to the normal state. He believed that alcohol conduced to such an effect, not by its actual consumption, but by its mere presence, the same as did common salt. He alluded in the course of his remarks to the results of experiments upon alcohol made by Surgeon-General Hammond, who claimed to prove that by its use the amount of urea excreted was really less than without it, and that a person could do more work with a less amount of food. With regard to the habitual practice of using ardent drinks, he remarked that it caused healthy persons to live too fast, and become in consequence prematurely old. In disease, however, the effect of alcohol was simply by its presence beneficial in stimulating digestion and aiding assimilation.

Dr. Parker spoke strongly against the practice of whiskey drinking, which was becoming so common in the community on the slightest pretence, and thought it well that practitioners should be on their guard against prescribing it when they were in any doubt concerning its beneficial effects.

Dr. Blakeman related the case of a young lady who, in consequence of the prescription of a physician, was led into habits of intemperance to such an extent that in the course of eight months she was accustomed to take two and a half pints of brandy daily. She died a drunkard.

Dr. Post related a similar case of a young man, with strong hereditary predisposition to consumption, who, upon the advice of a physician to stimulate freely, also became a drunkard, and eventually died of delirium tremens.

Dr. Peaslee was in favor of stimulants in phthisis, when a good effect could be obtained by nothing else. He considered alcohol useful as a stimulant to digestion and to the nervous system, as well as a generator of animal heat. He thought it impossible that alcohol should arrest retrograde metamorphosis, as claimed by Dr. Hammond.

Dr. Batchelder stated that during a practice of over half a century, having pretty generally prescribed stimulants, he had never known a single case of habitual drunkenness as the result.

The Academy then adjourned.

FOREIGN CORRESPONDENCE.

LETTER XXXIX.

By PROF. CHARLES A. LEE.

ROME.

November 21, 1862.

The city of Rome lies in a vast undulating valley, extending up from the Mediterranean, and inclosed by a framework of mountains. It is watered by several rivers, of which the Anio and Tiber are the principal. A great portion of this plain, if not the whole, gives evidence of having been once covered by the sea; but there is also equal proof of igneous action. Monte Mario, on the right bank of the river, and 440 feet above the sea, abounds with fluviatile and marine remains, while most of the hills and mountains encircling the plain are of volcanic origin. Mount Soracte over the Tiber, however, is calcareous, as is also the Monte della Petra on this side, as well as the whole chain of mountains from Magliano to Piglio, forming part of the Apennine chain. We find fluviatile deposits on the Pincian hill as well as on the Esquiline and Aventine; but we also meet with lithoidal tufa of volcanic origin on the Capitoline, the Aventine, the Esquiline, and the Cælian, as well as many plains outside of the city. Indeed the great mass of the seven hills on which Rome was originally built is of volcanic origin, and we can trace distinctly a bed of lava from the elevation on which the tomb of Cecilia Metella is situated, six miles from the city, to the Alban Hills, some ten miles distant. The inference is plain that the soil of the great basin of Rome has been chiefly formed by volcanic eruptions, and that previous to that time it had been covered by the sea. The craters of these extinct volcanoes are still to be seen in the vicinity of the city, forming lakes of greater or less extent, or excavations destitute of water. The Tiber, like the Arno at Florence, is a muddy, turbid stream at all seasons: some of the old classic writers call it "*flavus*," and Virgil "*cæruleus;*" but instead of being yellow or azure, at present it is of a whitish-grey, or clay color. Doubtless its color varies according as it it is troubled or not with floods. There are no quays, and the banks are consequently being worn away and constantly changing. Its average depth where it passes through the city is from ten to twenty feet. The fish found in it are the sturgeon, shad, gudgeon, pike, mullet, dog-fish, carp, bream, and eel. It not unfrequently overflows its banks, and there are several most disastrous inundations on record.

Rome is supplied with the purest water through its aqueducts, although the quantity is inconsiderable when compared with that brought into ancient Rome. There were in the reign of Claudius nine aqueducts, eight of which were on the left bank of the river; of these the *Anio Novus* was sixty-two miles long, forty-eight of which were under ground; the Claudian aqueduct was forty-six miles long, thirty-six subterranean, and for ten miles it was carried on lofty arches, six miles of which are still seen stretching across the Campagna. All these aqueducts converged to nearly the same point, and entered the city at an elevation considerably greater than any of the hills on which it was built, so that the water was readily distributed to every part, and supplied innumerable fountains; the source of supply also being in volcanic strata, the water was free from lime and extremely pure. Of these eight ancient aqueducts on the left bank of the river only one is in use at the present day, viz. the *Aqua Virgo*, which was constructed by Augustus. Its course is mostly subterranean, and it furnishes, it is said, the best water in Rome. It also supplies thirteen large fountains, furnishing over sixty-six thousand cubic metres of water daily. The *Alsientine* aqueduct, constructed by Augustus on the right bank of the Tiber, thirty miles long, is still in good condition, having been kept in repair by the Popes, and supplies the fountains in the piazza of St. Peter's, and numerous flour mills, which was one of its principal uses in ancient times; but besides these sources Rome abounds with springs and wells of pure water. The least depth of the wells is twenty-eight feet, and the greatest one hundred and twenty-two on the Palatine. The depth of wells on the plains varies from ten to twenty feet, according to the greater or less accumulation of rivers. Seven of these springs have been converted into public fountains, and the physicians here regard their waters as extremely salubrious. I have certainly never tasted more palatable water in my life, nor seen any of apparently greater purity. In exploring the old *Cloaca Maxima*, built some six hundred years before the Christian era, and still fulfilling the purpose for which it was originally constructed, I came across a most abundant spring, limpid and sparkling, pouring its waters over the rocks, which is deemed highly medicinal by the Roman people, and eagerly sought after by all classes, though entirely destitute of any sensible properties. There are also three celebrated mineral springs in the vicinity of the city called *Aqua Acetosa*, *A. Acidula*, and *A. Santa.* The first derives its name from its acid taste, doubtless owing to sulphuric acid, like some in the western parts of our own State. It is diuretic and slightly laxative, and the spring is much frequented by the Romans in the morning. It is in great repute in hepatic affections. The *A. Santa* is about three miles from the city, and its waters are extensively used for baths as well as internally, especially in summer. The *A. Acidula* is similar to the *A. Acetosa*, only weaker, and is used for the same complaints. It is a well known fact that few parts of modern Rome present to the eye the original soil on which stood the ancient city—a fact sufficiently explained by the millions by whom the city has been peopled, and the various vicissitudes it has undergone. Besides the ordinary causes which are in operation in most cities, such as the elevation or depression of the soil for the construction or alteration of streets and houses, the transfer of ruins or rubbish from one locality to another, and the silent but ever active influence of time, Rome has been repeatedly overwhelmed by the hand of man, by flood and fire, and has also repeatedly risen on its own ruins. Excavations made on various occasions and for various purposes have disclosed in many places the height of the superincumbent masses. On the hills that were covered with ancient edifices, such as the Capitoline and the Esquiline, the general elevation of the soil is about eight feet; but there are some remarkable exceptions, as on the Cœlian, where the first story of the house of Augustus is completely entombed, and near the church of St. Paul and St. John the ancient jail is more than eighty feet below the present surface, and near the arch of Dolabella it is thirty feet; while the valleys have been filled up from nine to thirty feet above their ancient level. Owing to this circumstance the distinct boundaries of the seven hills of ancient Rome are not easily defined, and some of them have almost entirely disappeared. It is a well known historical fact, moreover, that before the incursions of the barbarians the jail had risen several feet above the ancient level. In examining places where excavations had been made I find the lowest stratum presenting either aqueous deposits, the result of inundations, or vestiges of conflagration, or ruins of fallen edifices, over which lie successive heaps of rubbish of every sort. It is generally admitted that the *Campagna* of Rome was at a very remote period thickly inhabited, of which its numerous ancient cities, whose ruins still remain, are a sufficient evidence; at a later period we also know that the neighborhood of the city was deemed highly insalubrious, as it is at the present day. Cicero speaks of Rome as a healthy city in the midst of a pestilential region; and Livy, speaking of the mutiny of the Roman garrison of Capua, among other grievances says, they complained of being confined in an unhealthy district outside of the city. Strabo, also, says, that in his day the insalubrity of the air was confined to a few places in the neighborhood of Ardea, Antium, and the Pontine Marshes. But during the first three centuries of the Christian era the Campagna was thickly studded with numerous suburban villas, as their ruins still attest. At present it has returned to the state of abandonment and consequent insalubrity mentioned by Cicero and Livy. This corresponds exactly to what we have sometimes observed in our own country. The air of the Campagna has been different at different periods; salubrious, as a general rule, when populous and well cultivated; and insalubrious when not tilled, and comparatively reduced to a wilderness; so that its insalubrity is not owing, as many suppose, to its having been formerly better drained than at present, but to its better cultivation and denser population. Still, there are permanent causes which will always render the Campagna more or less unhealthy: its surface lies at so low a level that it is difficult, if not impossible, to drain it well; the waters that fall in rain, descend in torrents from the neighboring hills, or escape from the aqueduct, are retained and stagnate in the soil; immense quantities of animal and vegetable matters are constantly undergoing decomposition during the summer droughts. In the days of Trajan it was believed that the city was rendered unhealthy by the Pontine Marshes, though forty miles distant; but it is far more likely that the causes of disease were, as at present, in the city itself or its immediate neighborhood.

In regard to the healthiness of the city at present there are different opinions, for while some contend that it is extremely healthy, others maintain quite a contrary opinion. English and American physicians, resident practitioners here, inform me that the atmosphere of Rome is extremely salubrious, that its climate is far preferable to that of Florence or Naples, and that, above all others, it is the place for all pulmonary invalids. One thing, however, is certain, that intermittent and remittent fevers, and those too of the pernicious or highly congestive character, are very prevalent here during the summer and autumnal months. While visiting the military hospitals of the Papal army I found some two hundred cases of malarious fever, or patients slowly recovering from splenic engorgements or other of its sequelæ; and on inquiry of the attending surgeons I was told that all these cases originated in Rome, that the soldiers had constantly been confined to the city, and that this class of diseases was extremely common in Rome during the summer and fall. The Papal army in Rome, I may mention, consists of 3000 men only, although there are in all 8000 throughout the entire Papal dominions. Every person here admits that Rome is very subject to frequent, sudden, and extreme changes from heat to cold; that its sun is often intensely hot, so much so as to render all exertion during three or four hours in the middle of the day during the hot season extremely dangerous; hence, all labor, except what is absolutely necessary, is suspended during that time. The difference of temperature between day and night is also very great, and this, doubtless, also is a frequent source of disease. The most populous quarters of Rome are admitted to be the most salubrious, a fact which we often meet with in other cities if due attention is paid to sewerage and cleanliness. Lancisi and other Italian medical writers maintain that Rome can produce more examples of longevity than any other Italian city, centenarians being quite common. I believe there are no statistics on which we can rely if indeed, there are any at all, showing the rate of mortality in the city, or any of the States of the Church. One fact has been well ascertained, and it is important to those who come here to spend the winter, that during the winter months the city is entirely free from malaria, and one may reside here with perfect safety so far as regards malarious attacks. It is worth mentioning, too, perhaps, that the Romans themselves never leave the city for the country until after the summer heats, the city being regarded as by far the healthiest residence. Professor Secchi, the distinguished astronomer and physicist, in charge of the Observatory of the Collegio Romano, informs me that electrical changes and disturbances are extremely great and frequent in Rome, and that he has distinctly traced a connexion between them and nervous affections, the latter being greatly aggravated by such disturbances. As he has, however, promised me a detailed account of his observations, I shall pass the subject by for the present. The winter temperature of Rome is very mild: mean temperature of the year, 60° Fah.; of winter, 45°; spring, 57°; summer, 95°; autumn, 62° Fah.; mean temperature of hottest months, 97°; coldest, 42°.

I have thus given a kind of bird's eye view of some matters which may possibly interest your readers. In my future letters I shall speak more in detail, and particularly in regard to the hospitals and charitable institutions of the city.

It is not very long since we noticed the fact that the French Academy had awarded 2,000 *francs* to M. Kœberle, of Strasbourg, for two successful cases of ovariotomy. In singular contrast to this illustration of the state of operative surgery on the other side of the Straits of Dover, it is worthy of note that, at the last meeting of the Pathological Society, Mr. Spencer Wells exhibited eight ovarian tumors which he has removed within as many weeks, six of the cases proving successful; and that, in giving his experience of the operation during the present session of the Society, he said that he had operated during the session on twenty-seven cases, with a result of twenty-three recoveries and four deaths. His total experience he stated to be sixty-three cases, with a result of twenty deaths and forty-three recoveries. The greater success of late he attributed to the greater knowledge acquired by increasing experience. It would be rather an expensive undertaking for the French Academy to reward our successful ovariotomists at the same rate as M. Kœberle.—*British Medical Journal.*

The death of M. Renault has been announced to the Academy. M. Renault had received a commission to investigate the typhus attacking the cattle in the Pontine Marshes. He there contracted a deadly fever, and died at Bologna. It is said that he died of disease contracted from the cattle. M. Renault was born in 1805. He was Inspector of Veterinary Schools, and formerly professor at the Alfort School.—*Brit. Med. Jour.*

American Medical Times.

SATURDAY, JULY 11, 1863.

AN INDOLENT PROFESSION.

Every one interested in the welfare of medical science must have been struck, within the past year or two, with the growing inactivity of the profession as a body. The love for work by the great mass of the medical men seems to have been lost almost past redemption. Startling as this assertion may at first appear, we have certainly facts enough at hand to compel us to a humiliating acknowledgment of its truth. If search were to be made among the community of medicine, how many there would be found who would be compelled to confess to the truth of not opening a text-book for months at a time. The proportionately large number of such would be found truly appalling. No one can complain that the stimulus to exertion is not sufficient, for in every section of our country are to be found societies that are ready to invite discussion upon any medical topic, and the medical journals are willing to open their columns to every one who is zealous in the cultivation of his science; and yet what a pitiful record have we to make of the doings of the profession of this country. Some of our best societies can scarcely get together a quorum, and many of the most valuable papers that are read before them almost utterly fail to wake up any interest or provoke any interchange of opinion. This certainly is very poor encouragement to the few workers who are still to be found among us. Too many there are who attend our societies, who have scarcely energy enough to listen more than ten or fifteen minutes to a memoir before their eyes are heavy, and they nestle themselves for a comfortable nap until the time for adjournment arrives. We must not shut our eyes to the fact, also, that most of the older and more influential members absent themselves for months at a time from scientific deliberations, and deprive those who really are interested in the pursuit of knowledge, and who are consequently entitled to the results of the experiences of such men, of matured opinion and healthy counsel.

In view of this state of things, we do not hesitate to impeach those guilty of such neglect as violating the gravest of responsibilities by setting an example which cannot and will not fail to exert a deleterious influence, more or less general, upon the whole medical community. A certain character of meetings are always well attended, but this can perhaps be explained, not so much from the interest manifest in the topic to be discussed, as in the character of the refreshments which are to be served at the end.

Again, if we look into medical literature we can find still other proofs of a lack of vitality in scientific pursuits in the paucity of contributors to the different periodicals. With all the great resources afforded by large hospitals, dispensaries, and the like, what a comparatively small amount of material is collected therefrom to serve the common good! How few there are of those who enjoy unbounded opportunities for clinical experience that place the results of these labors upon record. There is no excuse for this. No one who has the good of the profession at heart has a right to withhold from it any of the results of experience or investigation which may be in his possession. It is common property, and should be dealt out as such, that all may be benefited by it. The never failing excuse for not doing so on account of want of time, is too senseless a one to be at all considered. It is not so much the want of time as it is the lack of energy to turn spare time to account. We are compelled to make the mortifying statement that many of our most celebrated practitioners, especially in New York, who have almost grown grey in the service, have hardly made a single record of their doings. May posterity give them the deserving punishment by forgetting them. This lukewarmness among us must be counteracted by a healthful stimulation to renewed exertion; the advancement of science, the interests and the honor of the profession demand it! But we cannot hope for better things until each individual member of the community appreciates his own duty in the matter, and the degree of accountability which he has to the profession as a whole. When each one does his part, and all work with one will, then, and not till then, will a rejuvenation take place. We have among us too few devoted students, too few who quietly, persistently, and untiringly work for the "very work's sake," and who strive to give others the benefits of their labors. We are afraid, however, that we have to look for most of these among the rising generation, inasmuch as too many of the older members are past conversion.

THE WEEK.

The alarming extent to which alcoholic stimulants are being resorted to as a beverage by the public should attract the serious consideration of physicians. The vice is beginning to find its way into all classes of the community, and the opinion is fast becoming prevalent that, used in moderation, stimulants are not only harmless, but actually beneficial in promoting health and strength. The various quacks who trump their "bitters" into the market are beginning to understand this, and have already reaped a golden harvest from a very extensive sale of their nostrums. In the army also liquors are very extensively used for other than remedial purposes, and among them Bourbon whiskey seems to be the favorite. A very interesting question in connexion with the prescribing of stimulants, came up for consideration in the discussion upon Dr. Flint's paper before the Academy of Medicine, and the points which were there alluded to deserve the attention of every practitioner in the habit of indiscriminately prescribing alcohol. Physicians can do much towards educating the people against the habit which they have fallen into, and at no time have their services in this respect been more urgently called for. Setting aside the deleterious influences of the continued use of pure liquors, a great amount of harm must necessarily be caused by the use of an inferior article, of which we have reason to suppose there is an abundance in the market, on account of the increasing demand.

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We call attention to a lecture in this number of the Times by Dr. Percy, on the Veratrum Viride, as a means of diagnosis in diseases of the chest, and hope that it will receive the attention and criticism that such a subject deserves, from those particularly interested in studying auscultation. Matters of such importance should be freely disseminated; and we will afford every opportunity to free discussion.

Very extensive preparations are now in progress for cleaning the streets of this city under the auspices of the new Street Inspector. If he follows out the plan which he proposes to do to its completion, we may once more hope for a salubrious dwelling-place. The city was never in a more filthy condition, which is saying a great deal.

The various medical societies of the city have taken a recess for the summer months.

Correspondence.

CLIMATE OF SAN SALVADOR.

[To the Editor of the American Medical Times.]

San Salvador, April 26, 1863.

Sir:—Before leaving the United States I was requested by several members of the Academy to inform them of the adaptation of the Pacific coast for invalids requiring a change of climate, and more especially those affected with incipient tubercular disease, or even the more confirmed forms of consumption.

A residence of one year in this locality, together with considerable experience in the treatment of the diseases incident to the country, enables me to reply in part, at least, to the queries put to me by your members on this subject. The seasons are divided into the dry, when comparatively no rain falls, and the wet, when showers occur nearly every day. The former usually begins about the middle of October, and terminates about the middle of May. The latter occupies the remainder of the year. During the months of November and December, and a part of January, strong winds prevail from the north, and reduce the temperature, especially in the upland districts, to a very unpleasant degree. This is the coldest season of the year. The thermometer rarely indicates a fall below 60° Fahrenheit, yet the mornings and evenings, more especially the latter, appear so cool as to render a fire (which, by the way, is seldom met with in the dwellings of the natives) quite agreeable.

Upon the subsidence of this wind the temperature rises in the city and neighborhood of San Salvador, which is about 2200 feet above the sea level, to 76°, and as the season progresses into March and April, to a still higher range, but seldom above 80°. This is the warmest period of the year. The wet season is marked by a diminution of temperature of several degrees, seldom below 72°, and usually 74° to 76°, which continues with much regularity. The night is at all seasons cool enough to be comfortable, and during the entire rainy season a blanket for covering is absolutely necessary.

The rainy season, which to my mind is the most delightful of the year, is very far from being one of continuous rain. Indeed, a period of three or four days' incessant rain, as frequently occurs in the United States, is almost unheard of. The sun at this season invariably rises in a clear and cloudless sky, and warms into life a landscape freshened and made fragrant by the shower of the preceding night. This is the period of growth, and the rich tropical vegetation, with its deep hues and its many-colored flowers, is now seen in its greatest perfection. A rich undulating landscape, covered with this many-tinted verdure, an atmosphere clear and exhilarating, and at the same time balmy, and the music of the birds that twitter in the deep foliage, many of which are quite familiar to the United States, cannot fail to tempt the invalid out at an early hour to enjoy its freshness and invigorating influence.

This sunshine invariably continues until one o'clock, at which hour clouds often gather and fall in the form of a heavy shower of from a few minutes to an hour's continuance, after which the sun again makes its appearance, and may continue until its setting. These afternoon showers are by no means regular, and it often happens that weeks pass without their occurrence. The night, however, seldom passes without one. No one, on awakening in the morning, asks whether the sun shines or not, because sunshine is invariable at this hour, and in nineteen days out of twenty the air is balmy and refreshing. The exception to this rule is only found during the high winds of November and December.

The diseases are such as are usually met with in a healthy locality in the United States, except that cases of goitre are quite frequent, and tubercular consumption seldom or never seen. Among the poorer classes the habitations are wretchedly built, and their occupants much exposed to the sudden vicissitudes incident upon sunshine and shower. Pulmonary affections, as pleurisy and pneumonia, are not uncommon, and catarrh, attended by much bronchial irritation and cough, is a very frequent complaint; and yet I have not met with a single case of confirmed tubercular disease, which is the more remarkable as the inhabitants, who are a mixture of the Spanish and Indian races, exhibit in the delicacy of their structure and peculiar organization all the characteristics of a scrofulous diathesis, which, in a climate like that of the United States, would doubtless rapidly light up into confirmed consumption.

Reasoning from these premises, I should suppose the climate of San Salvador peculiarly fitted as a residence for consumptives. The only positive facts I have on this point are the cases of two young gentlemen who were sent from England by respectable medical men, in what was said to be a condition of decided tubercular disease. They have both recovered, and are now active business men.

San Salvador is a city of eighteen or twenty thousand inhabitants. Its environs abound in delightful scenery, among which are many well cultivated estates, some excellent drives, and many picturesque rides suitable for horseback exercise, but not for carriages. There is, moreover, in its vicinity, the means of changing the climate to a higher or lower situation in a few miles.

The facility with which the journey is made from the United States, and the accommodations here, adapt it for invalids of both sexes. The native hotels, however, in all Central America, are, at the best, wretched affairs, and the tastes and customs of the inhabitants so different from those of other countries that the invalid would find himself but poorly accommodated in either; but there is in San Salvador an English hotel which may be safely recommended. To those who speak French, a selection may be made of a second, but for citizens of the United States the former is certainly the preferable establishment. The prices at these hotels, including such extras as one in delicate health might require, need not exceed two or two and a half dollars per day. For families who prefer their own establishment, houses may generally be obtained, and as the furniture is usually meagre, a couple of hundred dollars may serve for this purpose. I would recommend to persons coming here, whether intending to set up their own establishment or not, to provide themselves with pillows and mattresses, as the best of the native population prefer a simple mat to any softer bed, a custom I certainly am not disposed to adopt, and which the invalid would find still more inconvenient.

Should any member of the Academy see fit to recommend an invalid to visit this place upon the strength of this letter, or should any invalid adopt the suggestion for himself, I will endeavor, as far as I am able, to see that he is properly provided with accommodations and suitable attendance. I would remind him that, although he may find a delicious climate and bright skies, beneath which he may take out-door exercise nearly every day in the year, yet he will miss many things he is accustomed to at home, and find many peculiarities that may not impress him favorably. These, however, are trifling matters in comparison with the prospect of a restoration to health, and one which an invalid would gladly subject himself to.

My own experience in the treatment of consumption while in the United States, and which, I imagine, does not differ from that of the members of the Academy, was so melancholy that I would gladly have hailed any resort to change of climate which held out any prospect of success as a great boon, but I was so often disappointed in the result that I came to look with the same suspicion upon this mode of relief that I did upon others; nor do I now assert that the favored climate which

> "Bears healing on its wings"

for this class of patients is yet discovered. I only say that this is the only country in which I have had any medical experience, where consumption does not exist; and I think I am justified in reasoning, *a priori*, that the causes that prevent its occurrence may succeed in arresting its progress, even after it has been partially developed.

Yours truly,

JAMES WYNNE.

ARMY RELIEF BILL.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—In your paper of May 9th, a paragraph appeared under my signature, which was intended to characterize the publication of the bill in the TIMES of the 28th of March, known as the "Army Relief Bill," and the procuring its publication, as a "gross fraud."

I have been interrogated several times as to what was intended to be characterized as a "gross fraud;" perhaps it was not clearly defined. It consisted, in my opinion, in procuring the publication of what purported to be a bill, presented to, and pending in the Legislature of New York; while the fact is the bill, as published in your paper, was not before that body at that time, had not been presented to that body, and further, was never before the Legislature or any committee of the Legislature of the State of New York, during its late session, or at any former session. Procuring the publication, therefore, of what purported to be a measure introduced into the Legislature of New York, was a "gross fraud" upon your paper and the public.

Respectfully,

JOHN SWINBURNE.

ALBANY, June 22, 1863.

Army Medical Intelligence.

OFFICE SUP'T U.S. MILITARY GENERAL HOSPITALS,
MEMPHIS, Tenn., June 15, 1863.

SPECIAL ORDERS, No. 111.

The following assignment of Medical Officers is announced; they will be obeyed and respected accordingly.

Surgeon J. G. F. Holston, U.S.V., Inspector of Hospitals.

Surgeon D. A. Worrall, U.S.V., Adams Hospital.

Surgeon S. C. Cheaney, 29th Illinois Vols. Infantry, to relieve Acting Assistant-Surgeon C. H. Cleaveland, U.S.A., in charge of the Officers' Hospital.

Assistant-Surgeon J. P. Wright, U.S.A., to relieve Assistant-Surgeon D. J. Farrell, 70th O.V.I., in charge of the Washington Hospital, the latter on being relieved will report for duty to the commanding Officer of his regiment.

Acting Assistant-Surgeon Cleaveland to take charge of and fit up the Church Hospital for the treatment of all cases of erisypelas and hospital gangrene, now existing, or that may hereafter occur among the inmates of the General Hospitals in this city; he will receive special Instructions from this Office.

The Superintendent of Hospitals deems this a fitting occasion to manifest his high appropriation of the valuable and efficient services rendered by Assistant-Surgeon Farrell, 70th O.V.I., while organizing and fitting up the Washington Hospital; his zeal and energy are highly commendable.

B. J. D. IRWIN,
Surgeon, U.S.A., Supt. of Hospitals.

ORDERS, CHANGES, &c.

The contract of Acting Assistant-Surgeon Lewis A. Hall, U.S.A., has been annulled for attempting to defraud an enlisted man of money which he borrowed from him.

Leave of absence for thirty days has been granted to Surgeon E. T. Perkins, 71st New York Vols.

Surgeon E. D. Daily, U.S.V., and Assistant-Surgeon Andrew H. Smith, U.S.A., have tendered their resignations.

Drs. W. F. Norris, Edward Cowles, and Michael Hillary, have been appointed Assistant-Surgeons in the regular army.

Mr. W. M. Giles, of New York, has been appointed Medical Storekeeper, U.S.A.

The General Hospital at Broad and Cherry streets, Philadelphia, has been closed. Surgeon John Neil, U.S.V., lately in charge, has been ordered to Summit House Hospital.

Surgeon John G. F. Holston, U.S.V., has been assigned to duty as Inspector of Hospitals at Memphis, Tenn.

Surgeon J. E. Quidor, U.S.V., to charge of Convalescent Hospital, Young's Point, La.

Assistant-Surgeon C. J. Kipp, U.S.V., to General Hospital No. 1, Nashville, Tenn.

Surgeon G. R. Weeks, U.S.V., to the McPherson Hospital, 17th Corps, near Vicksburg, Miss.

Surgeon John W. Foye, U.S.V., to Hospital No. 19, Nashville, Tenn.

Surgeon Frederick Seymour, U.S.V., is superintending the erection of a large Field Hospital at Nashville, Tenn.

Surgeon D. P. Smith, U.S.V., has returned from leave of absence, and resumed his duties in charge of Fairfax Seminary Hospital, Va.

Surgeon S. D. Carpenter, U.S.V., has been assigned to the Webster Hospital, Memphis, Tenn.

Assistant-Surgeons L. C. Rice and M. K. Moxley, U.S.V., to the Floating Hospital "Nashville," near Vicksburg, Miss.

Surgeon O. M. Bryan has relieved Surgeon John M. McNulty, U.S.V., as Medical Director, Department of New Mexico. Surgeon McNulty is assigned to duty as Medical Inspector of the Department.

Surgeon J. W. Pittinos, U.S.V., has been assigned to Camp Parole, Md.

So much of S. O. 264, from the A. G. Office, as dismissed Assistant Surgeon John A. Meck, 89th Indiana Vols., on false charges presented by Colonel C. D. Murray of same regiment, has been revoked, and Assistant-Surgeon Meek is restored to his regiment, provided the vacancy has not been filled.

Leave of absence for twenty days has been granted to Assistant-Surgeon J. J. Conlan, 61st Ohio Vols., on Surgeon's certificate of disability; and on the same certificate to Surgeon L. E. Norris, 17th Maine Vols., for twenty days.

Assistant-Surgeon H. R. Silliman, U.S.A., to report to Brig.-General A. Schoepf, at Fort Delaware.

Surgeon W. S. Thompson, U.S.V., has been ordered to report to Colonel C. M. Prevost, at Harrisburg, Pa., for duty with the Invalid Corps.

Medical Inspector G. W. Stipp, U.S.A., has been relieved from duty in the Department of the South by Medical Inspector A. C. Hamlin, U.S.A., and has reported for duty to the Secretary of War.

Surgeon Charles Sutherland, U.S.A., now on duty in the Department of the Tennessee, has been ordered to report to Major-General Foster, commanding Department North Carolina, as Medical Director of that Department.

Assistant-Surgeon L. W. Read, U.S.V., to report to Major-General Heintzelman, commanding Department of Washington.

Surgeon William H. Morton, 1st Minnesota Vols., having tendered his resignation, has been honorably discharged the service of the U.S.

Leave of absence for thirty days has been granted to Assistant-Surgeon John G. Perry, 20th Massachusetts Vols.

Surgeon George Suckley, U.S.V., will report in person for duty to Major-General Schenck, at Baltimore, Md., as soon as his services can be dispensed with in the Army of the Potomac.

The appointment of Sherman Morse, as Assistant-Surgeon, 2d New York Cavalry, has been revoked, he having failed to report for duty with his regiment.

Assistant-Surgeon Joseph Swartz, 166th Pennsylvania Vols., having been absent from duty for over three months, has been discharged from service on account of physical disability.

The following assignments to duty of Medical Officers have been made:

Surgeon S. D. Carpenter, U.S.V., now on duty at Fort Kearney, Nebraska, and Assistant-Surgeon G. F. French, U.S.V., to report in person to Major-General Grant, commanding Department of the Tennessee, and by letter to Assistant Surgeon-General Wood, at St. Louis, Mo.

Assistant-Surgeon S. E. Fuller, U.S.V., recently appointed, to report in person to Major-General Rosecrans, commanding Department of the Cumberland, and by letter to Assistant Surgeon-General Wood, at St. Louis, Mo.

Assistant-Surgeon W. C. Bennett, U.S.V., recently appointed, to report to the Medical Director, Army of the Potomac.

Assistant-Surgeon P. A. O'Connell, U.S.V., recently appointed, to report to Major-General Burnside, commanding Department of the Ohio.

Surgeon Joseph P. Colgan, 59th New York Vols., having been absent from duty over three months, has been discharged for physical disability.

Colonel George D. Ruggles, A.D.C., and Assistant Adjutant-General, has been ordered to proceed to New York, and there organize such discharged or disabled soldiers and enlisted men in the hospitals for service in the Invalid Corps, as may meet the requirements of General Orders 105, current series. Assistant Surgeon R. Bartholow, U.S.A., has been detailed to assist Colonel Ruggles in the above duties.

Assistant-Surgeon Alexander M. Speer, U.S.V., is on duty at Seminary Hospital, Columbus, Ohio.

Surgeon W. S. Forbes, U.S.V., has been assigned to the 13th Army Corps as Medical Director, relieving Surgeon J. G. F. Holston, U.S.V., who has been assigned to duty superintending removal of the wounded from the Yazoo to the hospitals at Memphis, Tenn., etc.

Surgeon S. F. Elliott, U.S.V., has returned to Hilton Head, S. C., from leave of absence.

Original Lectures.

DISEASES OF THE RESPIRATORY ORGANS IN CHILDREN.

BEING A COURSE OF LECTURES PREPARED FOR DELIVERY DURING THE SPRING SESSION OF 1862 IN THE COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.

BY THE LATE
C. VAN ALEN ANDERSON, M.D.,
PHYSICIAN TO CHILDREN'S DEPARTMENT, DEMILT DISPENSARY, N. Y.

LECTURE IV.—PART I.

PERTUSSIS, OR HOOPING-COUGH.

One of the commonest, most interesting, and least understood of the affections of infancy, is a disease which is both contagious and epidemic in its nature, characterized by a particular kind of cough which returns in frequent paroxysms. The expirations in which the fit of coughing consists, succeed each other with great rapidity, and are terminated by a prolonged and sonorous inspiration which is known as the *hoop*, and from which the disorder has acquired its usual designation.

No positive mention of it can be discovered in the works of the Ancients, nor in those of the Arabian physicians; it has in consequence been presumed to have passed from the East Indies and Africa into Europe. Baillou records in 1578 an epidemic disorder which resembled in many points the ordinary form of pertussis. It arose towards the end of a dry and hot summer, attacked principally children, and the cough was so violent that it produced bleeding from the nose and mouth, and vomiting. In 1682 Willis appears to have intended this disease by his description of a suffocative, convulsive cough of children, and seven years after we have another record of an epidemic of the same kind which prevailed in Paris, by Dr. Schenck. From the commencement of the eighteenth century, however, our knowledge of the disorder becomes fuller and more reliable. Since the year 1724 epidemics of it have been frequent, and differing considerably from one another in many of their features, yet preserved the peculiar and familiar symptoms; sometimes they were marked by a complete absence of fever; sometimes, on the other hand, the fever was sharp, and either continuous or intermitting. In the epidemic observed at Vienna in 1746, the malady lasted from twenty to thirty days, and was marked by frequent epistaxis; that which prevailed in Mecklenburg in 1757 had, as its distinctive peculiarity, the occurrence of nausea and vomiting; while that which reigned in Copenhagen in 1767 was complicated by tertian ague, by convulsive attacks in infants during the period of dentition, by threatenings of suffocation when the cough came on during sleep, and by repeated relapses.

In 1769 the disease appeared in its severest and gravest form in Sweden, and was then observed by Dr. Rosen. It usually began with violent fever, and was accompanied by abundant epistaxis, emaciation, general anasarca, hæmoptytis, and very great mortality; sometimes it terminated in phthisis. In 1806 the epidemic which extended over the continent, chiefly attacked children between five and ten years of age, and had no catarrhal stage whatever, but commenced with hoarseness and sneezing, and was complicated by pneumonia and measles.

In Dillingen, in 1811, the paroxysms came on in the morning, together with convulsions, and in young subjects, delirium; at Milan, in 1815, hooping-cough and double tertian fever appeared in the same patients; during the exacerbations the cough and paroxysms of pertussis vanished entirely, only, however, to be seen again during the interval. It would be impossible, however, to describe the different ways in which it has from time to time manifested itself; in the present day the epidemics of this disorder seem to have lost much of their intensity. The causes that produce them cannot be appreciated; they invade a village, a town, or an entire district at irregular periods. Their symptoms are at one time severe, at another comparatively unimportant. Hooping-cough too, as you know is common with some of the eruptive fevers, appears but once in the lifetime of a single individual; so that while it may attack an adult or an aged person who has never before been exposed to the conditions which produce it, yet it is seen most generally in infancy and childhood.

First among its causes then, we may rank *age*. Several authors mention instances in which children have come into the world with the disease, and have hooped on the day that they first saw the light. But such cases are uncommon, and indeed during the first six months the malady is rare. Its maximum lies between six months and the fifth year of age. Dr. West says that in 1367 cases 41·2 per cent. were during the first two, 56·7 during the first three, 82·9 during the first five, and 98·4 per cent. during the first ten.

Sex also has nearly as much to do with it as age, girls being far more liable than boys to contract it. Bouchut found that among thirty-three cases seen by him, twenty-one were amongst girls, and twelve amongst boys; and of one hundred cases at the Children's Infirmary of London, 55·3 per cent. occurred in females against 44·7 per cent. in males.

Pertussis chiefly affects feeble and delicate children, especially those which are of a lymphatic constitution, and it prevails in all classes of society. Poor children who are improperly fed, and imperfectly clothed, and who live in low, damp, unwholesome situations, are its favorite subjects. It appears indifferently in all seasons and climates, notwithstanding that it is thought to be more frequent in cold than in warm weather. In the winter of 1841, in London, the greatest intensity of the complaint was during the months of December and January; while in 1845 exactly the reverse took place, for it prevailed most widely during the months of June and July. Atmospheric changes do not seem to exercise much influence over it, but it often comes in the wake of an epidemic of measles, or during a period in which there is an unusual disposition to catarrh.

Several authors have denied its contagious character, but this is now well established by innumerable instances. What the nature of the contagious principle is we are unable to say; it has been supposed to be exhaled from the body of the patient, or to emanate from his breath. Dr. Rosen thinks that the morbific material may be carried about in the clothes of an attendant or physician, and relates an instance to show that he had transported it himself in this way. I will quote two cases of its propagation by personal contact, from the work of M. Bouchut. "Mr. Rosen relates the case of a child who, while in the country, contracted hooping-cough by playing with the children of the gardener who were themselves laboring under this disease. This child successively transmitted hooping-cough to his brother and sister. The mother, who often played with the last mentioned one, was also attacked, lastly the father, and all the servants who were brought into contact with those children were seized with the disease. In the house and around the house, the children and the individuals who did not directly communicate with the patients were free from the disease."

A woman who was confined at her own house early in August, 1843, was visited by one of her parents who lived in quite an opposite quarter of Paris. One of her nephews, who had been laboring under hooping-cough for a month, came to see her. This child remained the whole day near the newly delivered patient, and two days after this visit, that is to say in the fourth day from birth, the infant commenced coughing; eight days after it had hooping-cough.

The mother and child were admitted into the Necker hospital, where we were able to verify the existence of this disease. The child had as many as twenty attacks of cough in the twenty-four hours. Particular inquiries were made of the mother, to discover if there were other children laboring under hooping-cough in the house in which she lived, but there were none. In this case, then, contagion was decidedly the cause of the hooping-cough.

Still we are not justified in considering contagion the principal source of the disease, as some, especially Dr. Lombard, have done. The propagation of the disorder requires, in fact, a particular constitution of the atmosphere, and a special temperament. We cannot tell how long it retains its contagious character, nor at which period it is safe to allow communication between infected and uninfected individuals; we should therefore be particular to isolate a child who labors under it until the cough is *entirely* gone.

The symptoms of hooping-cough have been divided generally into two or three stages. French authors usually speak of a period of invasion, a period of increase, and a period of decline; some English writers mention the inflammatory, congestive, and nervous stages; and others again the catarrhal and spasmodic conditions, which is perhaps the more natural division, since the period of decline is simply the resolution of the disease. Even this division, however, is not faultless, for in some cases the hoop and the *kink*, as it is called, are present at the very beginning; while in others the simple coryza or bronchitis to which the convulsive cough succeeds, continues for such a long time that it can hardly be considered a precursory symptom; and in other cases again after the hoop has disappeared, and the symptoms seem to be slight, some trifling circumstance will reproduce the complaint in all its former intensity.

The first or catarrhal stage presents the phenomena of a simple coryza and slight bronchitis. The child appears to have caught cold. There is a cough, either dry or accompanied by increased bronchial secretion, and occasional sensations of heat and chilliness alternately; or else some fever, with a disposition to the tertian or quartan type. The little patient loses his appetite, and suffers with constipation of the bowels. He also sneezes frequently, his sleep is agitated, he is capricious and restless. His eyes are somewhat injected and watery, his eyelids have a dusky color, his face is swollen, and expresses sadness and depression. The cough distresses him more than anything else—it sometimes returns with extreme frequency, even as often as forty or fifty times in a minute, and may continue several days with this incredible repetition. This, however, is not common; it usually cannot be distinguished from the short cough of incipient bronchitis.

During this stage, then, we discover nothing but the usual symptoms of catarrh, and it is consequently impossible to diagnosticate hooping-cough at its beginning. No blame can attach to us if we even suspect the invasion of measles, or of other eruptive fevers, and we are very liable to commit this error during the first two or three days of the disease. The average duration of this stage is variable, depending somewhat upon the age of the subject. Dr. West, in fifty-five cases, in which the occurrence of the first hoop was ascertained, found it to be 12·7 days; in 1804, in Berlin, it lasted from eight to fifteen days; and in 1838, at Geneva, its length was from one month to six weeks. In an epidemic among infants from the time of birth to the termination of the first year observed by M. Trousseau, it was very short, as in two of fifteen infants it was absent altogether, and in ten of the thirteen others it only existed from one to seven hours. We may, however, estimate its general duration from twelve to fifteen days, and if the symptoms just enumerated appear in a child exposed to circumstances capable of producing this disease, we may be at least allowed to surmise its nature.

The passage from the first to the second stage is rarely abrupt, generally gradual. There is sometimes an intermediate period in which the cough is short, rapid, and repeated eight or ten times in succession without the appearance of the hoop. It lasts for some ten days, and then the pathognomonic paroxysm and crowing inspiration take its place.

When the disease is fully established, these peculiar symptoms are observed. The child is perhaps calm and tranquil, but suddenly and without any cause it seems to have a presentiment of the coming seizure; it becomes sullen, irritable, or anxious, the eye, the face, and the gestures expressing a certain degree of alarm; the movements of inspiration and expiration grow hurried, disturbed, and irregular, and perhaps the infant begins to cry. In most cases these premonitory phenomena are very short, but in some they last for several minutes. If the child be lying down, it quickly assumes the sitting posture; if it be standing it runs a little way to seize firmly some article of furniture, or to cling to the dress of the person nearest to it. Then begins a dry cough, convulsive in its nature, and characterized by a series of sharp jerking expirations, continuing so long that suffocation appears imminent: at the end of a variable time, there is heard a profound sonorous, loud, hooping inspiration, which is followed by the expectoration of a quantity of stringy mucus, or by vomiting. During this paroxysm or kink the face is swollen, and of a red or bluish color; the eyes are filled with tears; the capillaries are injected, the veins of the neck are distended, and the arteries pulsate violently. Blood, sometimes, in a violent attack, flows from the nose and mouth, or even from the ears: it is sometimes extravasated beneath the conjunctiva or into the cellular tissue of the eyelids. Bouchut mentions that he has seen bloody tears, and other authors mention both hæmoptysis and hæmatemesis as coming on during or immediately after the paroxysm. The first hoop rarely terminates the attack. It is succeeded, perhaps, by a little rest, but the cough shortly reappears with renewed energy, and is cut short by another hoop, and so on for a succession of these kinks. The length and intensity of the paroxysms are in proportion to their number, as are likewise the injection of the countenance, the anxiety, and the jactitation.

In some children, one single expiratory cough is immediately followed by a hoop followed by another cough and another hoop. Barthez and Rillict have counted fifteen or twenty such expirations and inspirations in a paroxysm from one-half to three-quarters of a minute in length. In very young infants, during the first year, the hoop is less prolonged and sonorous than in patients of a greater age, but the symptoms of asphyxia are more threatening and pronounced. During the attacks the limbs of the child are contracted; its body, and the neck, shoulders, and the head, are covered with a cold clammy perspiration; there are, as I have said, vomitings, and sometimes involuntary evacuations of urine and fæces; sometimes prolapsus of the rectum; sometimes the formation or reappearance of herniæ. The pulse is small and weak, and the convulsive condition of the organs of respiration may even expand into general convulsions.

After the end of the paroxysm the child appears exhausted, and requires some time to recover itself. The eyes are still injected and watery, the neck and face are swollen, and the latter has an expression of fatigue; the respiration and the pulse are accelerated: the skin is warm, and the limbs are trembling. Some children immediately begin to cry. However, these phenomena do not endure for a very long period; the child lies down and rests for a while, and then returns to its usual occupations. There is no fever, and no loss of appetite in ordinary cases, but it retains its usual interest in its games and amusements, or applies itself with undiminished vigor to the breast of its nurse. If, however, the attacks of coughing are very severe and follow each other very quickly it seems pallid, languid, and depressed.

The length of the intervals and the duration of the paroxysms are very variable; it is impossible, as regards this point, to establish any general rules. At first, and when the disease is severe, the kinks come on frequently—some authors say every five or ten minutes, some every half-hour, and some from twenty to seventy-two times in the twenty-four hours. They increase in frequency, however, during the first two or three weeks of the disease, or until its twenty-ninth or thirty-eighth day. Their usual duration is from one to five minutes, and a succession of them has been observed to last even as long as a quarter of an hour. They may be either regular or irregular in their return; and may appear to supervene spontaneously. A full meal may bring them on, or a fit of anger, or crying, or fright, or laughter. So, also, may a change of position, rapid deglutition, the impression of cold, the inspiration of too dry an atmosphere, or of one charged with strong perfumes, or with smoke, or likewise violent exercise, or the accumulation of mucus in the bronchi, especially if the secretion be profuse. It is remarkable, also, that sympathy will have the same effect, for if several children laboring under hooping-cough be brought together and one of them commences coughing, the others will join in chorus; "so that, says M. Bouchut, "several times in fact, it has been impossible for me to remain in the ward of these little children, so distressing to the ear was the noise which accompanied their efforts of coughing."

Original Communications.

TWO CASES OF INTUSSUSCEPTION OF THE SMALL INTESTINES, IN CHILDREN.

By J. LEWIS SMITH, M.D.,

LECTURER IN THE UNIVER. MED. COL., PHYSICIAN TO THE ORPHANS' HOME AND ASYLUM.

Case I.—This case occurred in the practice of Dr. Macfarlan, of this city, but was visited by me, in consultation, at his request. The history of the patient was as follows:—Its health had been uniformly good, and nothing unusual was observed in its condition, till the age of four and a half months, when it became restless as if in almost constant pain, with occasional exacerbations. Castor oil was prescribed, which operated freely, and then the following mixture. ℞. Magnes. calcinat. ℈j.; tinct. opii camphor. ʒij.; tinct. asafœt. ʒss.; aq. anisi ℥j.—M. Dose, ten to twenty drops, repeated according to the pain. These remedies failed to give relief, as did also chloroform, given in doses of two drops. After two or three days, another set of symptoms arose, those characteristic of pneumonia, namely, hurried respiration, accelerated pulse, short suppressed cough, and expiratory moan. He was treated with the oiled-silk jacket, moderate counter-irritation, and expectorant mixture containing carbonate of ammonia, and in a few days the pulmonary disease was evidently subsiding, but the pain in the abdomen, more intense at intervals, continued. His countenance was pallid and bore an expression of suffering. There was no distension or tenderness of the abdomen, and no abdominal tumor. He took little nutriment, and seldom vomited. In the last part of his sickness the dejections were scanty, and the three last days the stools, instead of being feculent, consisted of mucus and a little blood. Finally, the pain seemed to be growing less, when he was seized with convulsions, and died the same day, precisely two weeks from the commencement of his sickness.

Sect. Cadav.—Head not examined; body slightly emaciated; mucous membrane of trachea and bronchial tubes vascular; posterior portion of the lower lobe of each lung, solid, of a greater specific gravity than water, and not susceptible of inflation; it was in the second stage of pneumonia. Stomach, duodenum, jejunum healthy. In the upper part of the ilium was an intussusception, two-thirds of an inch long, presenting no trace of inflammation, either within or around it, and its vascularity not notably increased. Above the intussusception the intestine was empty; below it, and chiefly in the small intestine, was a dark-colored substance; evidently blood, and giving in a few hours the offensive odor of decaying animal matter. There was a passage through the intussusception, at least two or three lines in diameter, as shown by a probe. The intussusception sustained sixteen inches of the intestine, with its contents, without being drawn out, and it would apparently have sustained considerably more. The remaining organs were healthy.

Case II.—Male, died at the age of nineteen months, the last eleven of which he was under observation. The mother states that he had never been well since the age of one month, and that there had been little variation in the symptoms of his disease. During the period in which he was under observation, he was ordinarily fretful, and frequently seemed to be in considerable pain. His stomach, through this whole time, was so irritable that he rarely took more than three or four spoonfuls of nutriment without vomiting. There was, usually, more or less diarrhœa, but no tenderness or distension of abdomen. He grew slowly, but gradually, more emaciated, and finally died in a state of extreme emaciation and exhaustion. He had no convulsions, and was conscious till the last.

Sec. Cadav.—Brain not examined; lungs healthy, except a circumscribed portion, which was inflamed, at the summit of the right lung; liver small, and almost destitute of oily matter, as shown by the microscope. In the jejunum, about two feet below the stomach, was an intussusception, two inches long, the intestine forming which seemed to have undergone no structural change. Above the intussusception the intestine was of small calibre, and entirely empty, and pale; below the intussusception the intestine was somewhat larger than above, but it seemed quite healthy. The invagination was sufficiently pervious to allow water to pass through it, and it readily sustained the weight of two feet of intestine. From eight to ten inches below this intussusception there was another, which was immediately drawn out, the moment the intestine was disturbed. The other abdominal viscera were healthy.

Remarks.—Cases like the above are rare, or at least have been rarely observed. M. Rilliet—and of the standard writers on diseases of children, no one has given more attention to the subject of intussusception—states that this disease, almost always in the young child, is seated in the large intestine, whereas in older children it is sometimes in the larger and sometimes in the small. "* * * * Et occupe presque toujours le gros intestin, dans la première enfance; tantot l'intestine grêle, dans la seconde enfance." In a statistical paper on intussusception in children, published by myself in the Amer. Jour. of Med. Sci., Jan., 1862, there are brief records of fifty cases, and in all those in which post-mortem examinations were made, the disease was seated in the large intestine. But we see from the above cases, that intussusception, persistent and irreducible, occurred in the small intestine in one child of four and a half, and in another of nineteen months.

In each patient, the intussusception was so firm as to sustain considerable weight, and yet there was no appearance of inflammation within or around the mass, and none, or but slight, of congestion. In the first case blood had escaped, in considerable quantity, from the incarcerated intestine. Whether there had been in this patient, towards the close of life, strangulation producing congestion, which was relieved by rupture of the capillaries, in the same way that meningeal apoplexy relieves congestion of the membranes of the brain, in the infant, or whether the capillaries were ruptured by attrition of the mucous surfaces, from the forcible peristaltic and vermicular movements, is doubtful. There was no appearance at the autopsy, in either case, of strangulation, for there was no accumulation or distension, above the seat of the disease, and the invaginated mass was pervious. It is evident, however, that perviousness after death does not show that there was perviousness previously, since at death the tonicity of the muscular fibres of the intestine is lost. On the whole, it seems probable, from both the symptoms and post-mortem appearances, that while in the second case there was no strangulation, in the first strangulation was present in the last three, and perhaps five or six days of its life. This, as regards the first case, is the opinion of Dr. Macfarlan, who saw the child daily from the beginning of his sickness, and examined its symptoms carefully.

Intussusception, in the infant, is usually accompanied by more or less tenesmus. Its absence in the above cases, was, no doubt, due to the fact, that the disease was seated in the small, instead of the large intestines. In place of tenesmus, there was in one case pain more or less constant, and with exacerbations; in the other, fretfulness.

The time at which invagination occurred in the second case, is doubtful. There were symptoms of disease, or derangement of the bowels, during the greater part of the child's life, and no new symptoms arose, to indicate the commencement of intussusception. Could the intussusception have been present for months? Its relation to the derangement of the bowels is uncertain. In my statistical paper, allusion is made to the statement of some Continental observers, that this disease in the child, after continuing for an unusually long time, may gradually subside, and health be restored, without sloughing of the affected part. Bouchut says: "Amongst other children, the disease lasts a much longer time, but the vomitings gradually cease, the intestinal hæmorrhage disappears, the strength returns, and the health becomes restored again, without the expulsion of fragments of the intestine. M. Killert, who points out this possibility of the cure of intestinal invagination, observes, that it always takes place in this manner." (Diseases of Children, trans. by Bird, page 493.) As reduction of an intussusception is ordinarily followed by immediate, and not gradual recovery, it seems as if these observers alluded to a favorable termination, in which neither reduction nor sloughing occurs. This was to me inexplicable. Of the fifty cases contained in my paper, and which were collected from Continental and British, as well as American Journals, there is none which terminated in this way. The majority of these patients died, and the few who recovered, owed their safety to the separation and expulsion of the invaginated mass. The above cases, however, may throw light on this point. Although both died, the intussusception, which we have seen was similar in the two, was of such a character, that it did not seem to render death inevitable, even if there were neither reduction nor sloughing. Possibly the more favorable cases of this form of intussusception may recover in a "gradual" way, whatever may be the anatomical alteration which the affected part finally undergoes.

174 W. 49th st.

BROMINE IN HOSPITAL GANGRENE.

By R. L. STANFORD, M.D.,

SURGEON U.S.V.

John Huber, a private of Stone's 1st Kentucky Battery, entered Hospital No. 12, Louisville, Ky., Jan. 8th, 1863, from Hospital No. 7, Perryville, Ky. He received a gunshot wound in the thigh at the battle of Chaplin Hills; amputation at the junction of the lower with the middle third of the femur was performed four days afterwards.

When he entered this hospital the stump was doing well. On one side, from the outer angle formed by the flaps up to and over the centre of the bone, had been repaired perfectly, and the skin renewed over the whole surface. Healthy granulations were seen filling up the wound on the inner side. The reparative process continued from this time up to March 18th, when a small spot, about the size of a ten cent piece, was discovered to be of a dark purple color, occupying the angle of the flaps on the inner side of the thigh, the purple hue extending above and beyond the edges of the wound for a distance of about one inch. A small, dirty colored, pulpy mass was also seen within the wound. From this dirty-looking pulp was also discovered a sero-purulent fluid of a slightly greenish color, which exuded from the parts below and around. From the wound was emitted an odor, pungent and exceedingly offensive. The skin of the limb, face, and body had changed its color since last examination, having acquired an ill-defined dusky hue. In a word, hospital gangrene had shown itself. The tongue was moist and covered with a dirty whitish fur; cheeks a little flushed. Bowels costive. Pulse 80, weak and feeble. No appetite. Urine highly colored. Countenance anxious. Intellect clear. March 19.—Pulse 100 beats to the minute. Breath emits a saccharine odor, tongue coated with whitish brown fur. Intellect clear. Skin exhibits a dirty yellowish hue, more marked than yesterday, and a few degrees above the normal temperature. Cheeks flushed. Bowels costive. Urine highly colored. Wound emits an offensive odor which can be smelt in any part of the ward. The diffluent pulpy mass of a much darker color than yesterday. A sero-purulent fluid still flowing from the wound. Not having been able to procure pure bromine, I ordered the wound to be properly cleaned of all detached substances, as well as that those which were still adherent be trimmed with scissors down to the sound tissues, after which to apply compound solution of bromine and the parts to be covered with a yeast poultice. Ten drops of muriated tincture of iron were given every six hours. Whiskey, one oz. every four hours. Diet, soft boiled eggs, tea, and bread. On the 20th, symptoms were same, except that the slough had enlarged.

22d.—Pulse increased in frequency. Ulcerative process spreading. I directed the wound to be again thoroughly explored, and the adherent portions of the slough trimmed close to the sound tissues. After which the compound tincture of bromine was again applied, as on the previous days.

On the 24th, a few bright red spots were discoverable in the wound. Treatment consisted of whiskey, quinia, and the daily application of the compound bromine.

On the 25th the wound did not show any further disposition to spread, and lost in a measure the offensive odor. There was, however, not much improvement at bottom of sloughing process. The solution of bromine was injected with an hypodermic syringe into the cellular tissue beyond the sloughing process. The internal treatment was of course continued.

27th.—Pulse 108; tongue commencing to clean from edges to centre; appetite somewhat improved. The dark gangrenous spots in wound have nearly disappeared. Locally, bromine and cinchona poultices as before. 28th.—Wound improving; all the dark or rather black spots have disappeared; there was still emitted an offensive odor. Patient complains of aching pains in and around the wound. Continual bromine solution to wound. 30th. —Wound painful, but improving in appearance.

I have given the treatment of the case for twelve days during which the gangrene gradually spread, destroying the soft parts around the bone and above the end, for a distance of fully three inches, leaving to this extent the femur exposed. From the 30th March up to the 15th April, the case exhibited about the same variation of symptoms from day to day. During the whole of the remaining time up to the 15th April, the wound emitted daily the same offensive and peculiar odor.

The skin increased its dirty yellowish hue up to the 6th April, and remained without material change till the disease was fully arrested. The constitutional symptoms commenced with the first appearance of the gangrene, and persisted until the gangrenous process was entirely arrested. The urine was voided during the continuance of the disease in sufficient quantity, but at all times highly colored. The bowels inclined to costiveness, but were easily moved, continuing to act for several days after a cathartic had operated, and then again became costive, requiring at intervals a mild cathartic throughout the whole time the disease continued. His appetite failed him at the first appearance of the gangrene, and continued with slight improvement, when the wound emitted less offensive odor, and falling back into the same state when the wound assumed a more unfavorable condition. Except these variations, it continued without improvement during the whole time of the continuance of the gangrene.

Upon the 15th of April I procured *pure* bromine, and immediately had the wound properly cleansed, and applied the remedy to every part of the ulcer, taking steps to be certain that the sound tissues beyond the diseased parts were reached in every part of the wound. The parts were then dressed with a cinchona poultice.

16th. Pulse 96, tongue coated and moist, intellect clear. Countenance bright, bowels regular, urine in sufficient quantity, but still highly colored. The whole surface of the wound almost as black as charcoal. The odor has entirely disappeared from both the wound and breath. Appetite has returned. He now craves meat for the first time since gangrene made its appearance. He says the wound feels sore, but in every other respect feels like a new man. The wound was dressed as before with a cinchona poultice. Discontinued bromine.

17th. Pulse 80, tongue cleaning, mind cheerful. Says he had a fine night's rest. Urine still highly colored. Wound looks better, the black incrustation separating slightly from the sound parts around the edges. Odor all gone, both from the wound and breath. He has a good appetite, and says he now feels like getting well.

From this time he gradually gained strength, and the wound steadily improved. All treatment was discontinued upon the 17th April, except simple dressing. The state of the case was, however, recorded daily until the 22d, when it was thought unnecessary to reduce anything more touching it to writing.

This case exhibits in a marked degree the genuine character of gangrene, and goes a great part of the way towards establishing the important fact that, contrary to the generally received opinion, it is a local and not a constitutional disease. The character and genuine nature of every disease which has not yet been fully established, can only be settled by that sort of experiment which makes everything touching the case a subject of investigation. It is not enough, therefore, to apply bromine to a gangrenous wound, and to see that it destroys the virus, but the exact strength of the remedy should be known, the condition of the ulcerated parts, the mode of application, the way in which the wound was prepared for the reception of the remedy, and all the local, as well as constitutional symptoms, should be perceived and noted at the time of making the application, together with every circumstance that could possibly have a bearing upon the case.

Proceeding in this way, we may not only increase our own stock of knowledge, but may be able to establish facts which will benefit mankind generally.

From my own observation in the treatment of hospital gangrene, erysipelas, and diphtheria, I am entirely satisfied that all of them are local diseases, and may be cured by the use of bromine properly applied. The foregoing case establishes, as far as any single case can do, the efficacy of pure bromine over the compound solution, the latter having been applied daily for the term of twenty-seven days without arresting the gangrenous process, while the pure bromine arrested it upon the first application. The wound was prepared for the reception of the remedy in the same way, and with no more pains than had been taken upon each application of the solution. The constitutional symptoms subsided within twenty-four hours after the pure bromine had been applied; the gangrenous odor disappeared entirely within the first six hours after the application of the pure remedy. Within twenty-four hours the appetite returned, and has continued good ever since. The skin gradually gave up its dirty yellowish hue; the urine also gradually returned to the normal color; the pulse dropped down to eighty, and has maintained that number of beats per minute from the second day after the application of the pure remedy up to the present time.

The patient is now able to walk about the ward, and would do so if he had two legs. The wound has been filled with granulations, and is being skinned over, there only remaining a small portion upon which the skin has not been renewed, and this immediately around the bone.

If this was the only case I had treated with this remarkable agent, I could not speak in as strong terms as I am now about to do; but I have treated a number of cases that were equally as grave as this one, and with complete success in every instance; and numerous cases in other hospitals have been met, where a like success crowned its proper application. I can say to the profession with unbounded confidence, that we have in bromine an agent that will, when properly applied to gangrenous ulcerations, cure them in every instance with more certainty than quinine cures intermittent fever. Not only will it meet antagonistically the virus which sets up this disease, and destroy it in the wound, but if vapor of bromine be kept in the ward in sufficient amount to be perceptible to the smell, it will prevent the spread of the disease to others, and, more than this, it will cure all the cognates of gangrene arising from like virus. We have, then, in bromine, when properly used, a remedy which will cure many of the most formidable diseases which affect the human family. If what I have stated be true with regard to this great remedy—and I assert that it is, and, moreover, that no one will ever be able to prove to the contrary, if he will but apply the remedy as I will indicate before I close this article—I invite all who have cases under their charge in the Military Hospitals throughout the U.S. to apply at once and without delay this sovereign remedy in the treatment of hospital gangrene, diphtheria, scarlatina, erysipelas, and probably small pox, as well as in the treatment of poisoning from the bites of insects and serpents. As these diseases are all set up by the application of a virus, and the virus which produces each has an animal origin, I have nothing to lose by asserting that bromine will meet and neutralize the poison which gives rise to each of them. I might go further, and state that there are other formidable diseases which have an animal virus as the cause of their origin in the human system, and which may be met and cured with this remedy; but I will not at present speak of them or of the mode of applying the remedy. I look upon the use of bromine, in the treatment of the diseases which I have specified, as being fully able to strip them of their heretofore formidable character, and they may now be placed in the category of such diseases as can be as easily managed and cured as scabies.

To Surgeon M. Goldsmith, of the city of Louisville, Ky., belongs the credit of this treatment. Although he has not, as far as I am informed, treated many cases himself with the remedy, yet he conceived its powers over the class of diseases which I have specified, and recommended its use in the military hospitals in and around this city. The surgeons commenced experiments with this remedy last winter, and the results have equalled the most sanguine anticitations of not only Surgeon M. Goldsmith, but, as far as I know, have met the expectations of all who have used it, since his recommendation, in the military hospitals of this place. So confident are all who have used the remedy that they can not only cure hospital gangrene with it, but that they can also prevent it spreading, that no one here ever separates patients having gangrene from other wounded patients in the same ward. I hope, however, that no one will, without giving this remedy a fair trial, presume so much against the just praise which I have bestowed upon it as to pass along the line of the old routine practice, thinking, as is too often the case, that the praise bestowed upon it is idle. I am fully aware that I have used strong language, yet I feel confident that, when the profession comes to apply this remedy in the treatment of diseases as I have done, I have nothing to lose by the use of a single word which presents the facts in its favor.

As to the proper use and application of bromine in the cure of gangrene, I will make the following statements:—The pure bromine should always be used in the treatment of gangrenous sloughing in preference to any solution which can be made. The wound should be properly prepared for its application, and then the remedy should be properly applied. Every part of the pulpy mass, and detached debris, should be removed from the wound, as far as possible, without injuring sound portions of tissue in the wound. To this end the undetached pulp should be dissected away with forceps and scissors. The wound should then be thoroughly washed with warm water, after which it should be dried with a sponge, and then with the rounded end of a spatula scrape away any remaining portions of the lifeless tissues which may be still adherent, yet capable of being removed without too much injury to the adjacent sound parts. This done, wash and dry the wound as before directed, and then apply pure bromine to every part of the diseased surfaces, taking special care not to be deceived as to the certainty of having reached with the remedy every gangrenous point, some of which may lie beyond the common surfaces, the virus having travelled out of sight in and along the cellular tissue. To make the application certain, and beyond the possibility of deception, a small round end of a glass test-tube should be used, or some other instrument answering the same purpose, with which the bromine should be pushed into the cellular texture, and thoroughly stirred in every part of the wound. If these directions be strictly followed, it will rarely be necessary to make more than one application of pure bromine. The second application should not be made within the four first days after the first application. If the odor peculiar to the disease is entirely removed by the first, the second application should not be made; but if at the end of the fourth day there is any remaining odor, the surface which was charred by the remedy may be removed, and it will then be easy to discover what points in the wound have not been reached by the former application: these alone should be touched with the remedy. After the patients have received an application of the remedy, the gangrenous surface may be covered with a yeast or cinchona poultice, or, if the surgeon chooses, he may dress it with lint or simple cerate.

Reports of Hospitals.

U.S. GENERAL HOSPITAL, ANNAPOLIS, MD.

COMPOUND GUNSHOT FRACTURE OF THE FEMUR, TREATED WITH SMITH'S ANTERIOR SPLINT.

By B. B. MILES,

ACTING ASSISTANT SURGEON U.S.A.

(*Continued from page* 14.)

In the treatment of fractures of the extremities, the general indication is to furnish mechanical support that shall supersede the office of the injured bone in maintaining the form and length of the limb, until union shall have taken place. The apparatus which I am about to describe is applicable to all fractures of the thigh and leg. I shall describe its employment in the treatment of fractures of the thigh. The splint now in use is made of wire, and is constructed of one piece of wire bent twice at right angles upon itself at the extremity, being three inches wide at its upper, and two and three-fourths at its lower extremity. It should be long enough to extend three inches above the anterior spinous process of the ilium, and three or four inches beyond the toes. This would make it three feet and ten inches for an adult. Support is given by cross pieces clenched upon themselves. The splint is then to be bent, the lower angle to correspond to the foot, which is from 120° to 125°. The angle at the knee is very obtuse, about 160° to 165°. The angle at the hip should be of the same degree. It will often be necessary to vary these angles to suit particular fractures. The angles are easily made by bending the splint over the margin of a chair.

The splint is now to be wrapped with a bandage, and is ready for application. The suspensory apparatus consists of a small iron pulley, which is to be fastened to the ceiling over the patient's bed, nearly the middle of the tibia. A cord about half the thickness of your finger is to be passed over the pulley, and through a small tent block, by which you are able to elevate or depress the limb. This cord has a loop attached to its end about two feet above the limb. Through this another cord about five feet long passes, and hangs double from the loop; each end has a claw or hook attached, which is made of wire the width of the splint; the points sharpened and turned inwards to embrace the wire splint through the bandage, which prevents them from slipping. In the application of this splint the limb is carefully adjusted, and supported by the hands of an assistant. The splint is now to be laid along the anterior aspect of the limb, placing compresses underneath at the hip and instep. Five pieces of bandage, long enough to embrace the limb and splint; one under the foot, one around the ankle, the third beneath the knee, the fourth above the knee, and fifth around the thigh; all these strips are to be fastened on the top of the splint with pins, and now the hooks are to be applied. In fracture of the middle of the thigh, the upper hook is to be placed over the seat of fracture, and the other above the middle of the tibia. The limb is now raised from the bed, so as to allow the free application of the roller, which, commencing at the foot (care being taken not to press the limb up against the splint), is carried up along the leg and the thigh; on reaching the hip a few turns are to be made obliquely through the groin and around the pelvis. In regard to suppurating wounds, an independent bandage is to be applied. Next in order is the application of extension and counter-extension (this, although simple, seems to be the great objection with many of the surgeons). This is made by moving the head of the bed backwards, so as to give obliquity to the suspending cord. Counter-extension is made by the body; and to obviate the descent of the body towards the foot of the bed, a brick or block may be placed under the foot of the bedstead. The limb should be raised high enough to lift the limb clear of the bed.

What have we accomplished?

1st. The limb rests on the turns of the bandage, and cannot change its position even when the body moves, for it is carried with it.

2d. As above stated the splint is secured to the pelvis, and the limb moves with the trunk, which always retains the same position to it.

3d. Should the body be moved to the right or to the left, this will not change the relations of the upper and lower fragments.

4th. Regard to the deformity, the regular pressure of a well adapted bandage, assisted by the obliquity of the cord, which has a tendency to straighten the limb and resist all deformity.

5th. The artificial construction of extension will be seen by the obliquity of the cord, which is changed to suit each particular case, and which renders it unnecessary to be tightening and loosening the bandage from day to day.

6th. Should the body have a tendency to descend towards the foot of the bed, the limb swings upon the cords, and the fragments are prevented from being jammed upon each other.

This splint is adapted to all fractures of the femur, and to none is it more appropriate, and in none has it accomplished more satisfactory results, than in gunshot fractures caused in the present war.

It has been the opinion of our most eminent surgeons to reject all mechanical means in the treatment of fractures of the neck. Now, if we can furnish any comfortable support to the limb, allowing the leg and trunk liberty, should it not be employed even for that? In treatment of the cervix, that portion of the splint which extends beyond the groin (or pelvic portion) is very important, and should extend well upon the trunk, and should be well secured to the trunk by the bandages. The extending apparatus is also important, and the obliquity of the cord should be well watched. The great advantage which this splint possesses over other apparatus is, that it raises the injured thigh from the mattress, permitting a free circulation of air, and preventing the accumulation of pus, and whatever dressing is used from excoriating the skin, and thus affording an easy and convenient access to the wounds, also enabling us to clean the patient's person; lastly, it gives the patient the greatest amount of comfort, giving him the privilege of changing his position *ad libitum*.

This splint was the invention of Prof. N. R. Smith, of Baltimore City, Md.

FOREIGN CORRESPONDENCE.

LETTER XL.

By PROF. CHARLES A. LEE.

ROME.

Nov. 26, 1862.

It was with no little interest and curiosity that I entered upon a systematic examination of the hospitals of Rome, believing, as I do, that the ability, zeal, and success with which such institutions are managed, mark, with very accurate certainty, the degree of civilization, if not Christianity of a people. I had visited, with equal pleasure and surprise, the magnificent hospitals of Venice, Padua, Verona, Bologna, Florence, Pisa, Leghorn, Naples, etc., so far exceeding my expectations in everything connected with efficiency and successful management; and I have not been disappointed in my expectation of finding the hospitals of Rome creditable to this seat of the Fine Arts, and the centre of the Catholic world. Accompanied by Dr. O'Flynn, Surgeon to the late Irish Battalion in the Papal service, and now in attendance on the Papal military hospital, I have successively visited all the Roman hospitals, and will speak of them briefly in the order of visitation, or, at least, the most important of them.

We first visited the great hospital of *San Spirito*. This stands on the right bank of the Tiber, near St. Peter's. It is said to have been founded by a Saxon king, who, having abdicated his throne and become a Christian, took up his residence in Rome in 728, and here founded a hospital for the relief of his countrymen. It was, however, greatly enlarged at the end of the twelfth century by Innocent III., and has gone on increasing so as now to form almost a small town within itself, being very richly endowed; not only possessing large landed property in the city, but also much of the territory between Rome and Civita Vecchia. This Pope confided it to the *Brothers of the Order of San Spirito*, from which it derived its name. Successive Popes have done much to enlarge and enrich it. Benedict XIV., e.g., in 1751, added a museum and anatomical theatre; the museum was increased with very choice specimens by Pius VI.; still Pius VII. added dissecting-rooms, baths, and many other requisites. The most important repairs, however, in its management and administration, as the Romans think, have been made by the present pope, Pius IX., in the appointment of twenty Capuchin priests to its spiritual assistance, and the erection of a house for them within the inclosure, so that some of them might be in constant attendance on the patients both day and night. The entire establishment consists of a male and female hospital, entirely distinct; divided, as usual, into medical and surgical wards, clinical wards for each sex, with a lecture and operating-room adjacent; a military hospital for the Papal troops, a foundling hospital, and a lunatic asylum. There is space for about 2500 beds in the civil hospital, though ordinarily there are only about 650 medical and surgical cases in the wards. There are, besides, 450 lunatics. 15,000 patients are annually admitted; the mortality averaging about eight per cent., or even less. During the summer months the wards are filled with cases of intermittent and remittent fever from the Campagna, as well as large numbers from the city; in the winter season the number is greatly reduced. The small amount of mortality is attributed to the great proportion of malarious diseases admitted, which are usually promptly cured by large doses of quinine. I counted about twenty beds in the clinical ward, some of them unoccupied. There is a tolerable pathological museum in the hospital, as well as a collection of instruments, and a library, most of which were bequeathed to the institution by the eminent physician, Lancisi. The *Foundling Hospital* in San Spirito is capable of containing upwards of 3000 children; the number annually received is somewhat less than 1000. Statistics, in Rome, I believe, are only published once in five or ten years, and the last report I have seen gives 2941 deaths out of 5382 children received in a period of five years, showing a mortality of 57 per cent. A large proportion of the foundlings are sent into the country to be nursed, where the mortality is far greater than in the city. The recent mortality, it is said, is much less. I may remark that there are several other foundling hospitals in Rome, so that the number of foundlings is over 3000 annually; and they offer such facilities for admission that children are brought here from all parts of the Papal States, especially Sabina, Frosinone, Velletri, and the Camarca, and even from Southern Italy.

The *Military Hospital* on the opposite side of the street to the main buildings has only been in operation during the last year, the military patients having formerly been mixed with the civil cases. It consists of one immense ward, several hundred feet in length by forty-five in width, and perhaps equal height, allowing of two rows of beds on each side. Its general management is under the direction of the minister of war, M. Merode. The improvements recently made indicate that in a short time it will not suffer by comparison with any hospitals of the kind elsewhere. In the civil hospital there is one ward exclusively for wounds, casualties, and fractures, of which *cuts and stabs*, I was informed, constituted the largest proportion. There were three tiers of beds on each side of the wards, yet such was their immense size and lofty ceilings that I perceived no hospital smell in any part of the building. Although there were canopies for curtains, I saw none in use. I was happy to notice that the windows, which were opposite, and perhaps thirty feet from the floor, were kept constantly open, and a free current of fresh air continually supplied. The only things which strike one's attention as somewhat incompatible with our notions of comfort, are, the cold brick floors, without any covering whatever, and the absence of all means of warming, unless it be one or two small stoves. The Italians, however, it must be considered, have no idea of comfort in our sense of the word, and they rarely have fires in the winter even in their own houses. Besides, the winter climate here is mild, the temperature being seldom below 50° F. The hospital beds were very clean and neat, the bedsteads of iron, as they are in all the Roman hospitals, and the sacking stuffed with wool. The floors were clean; the nursing kind, assiduous, and intelligent. The military patients were served by twelve Sisters of Charity, the only nurses of the order in attendance on any of the Roman hospitals, although there are about forty in all in the city, the others being engaged, I believe, as private nurses. The sisters of this order have never been very numerous in Rome, as considerable jealousy exists towards them on the part of the other orders.

It has been ascertained that of the foundlings of Rome two-thirds, at least, are illegitimate, the remaining being the offspring of poor or heartless parents, who, from various motives or causes, adopt this mode of getting rid of them. In many instances, where the family is too needy to support all the children, one or more are stealthily committed to the wheel of the Foundling Hospital of San Spirito, with some mark on its dress by which it may be registered and afterwards identified and claimed. In many instances the poor mother is too delicate to furnish sufficient nourishment for the child, and too poor to provide a nurse for it, and it is sent accordingly to the asylum; and so it fares with the rickety, malformed, or diseased infants that do not seem, and really are not worth raising; and this is one cause of the great mortality. This facility of providing for offspring renders infanticide so rare that it is rarely or never heard of in Italy; and although it may have some tendency to promote illicit indulgences and sexual vice, it cannot be denied that it does away with all temptation to destroy offspring. In London and all the large towns of Great Britain infanticide is of daily occurrence, if we are to believe the statements of the English papers, and yet in point of morality they cannot compare with Rome and other large Italian cities, judging from all one can see or hear. I have been much in the street at night, but I have never yet seen a ***street-walker*** or a female who would even be suspected of prostitution. Whatever objections may be urged against foundling hospitals, I cannot but believe, from what I have observed here and elsewhere, that when under the protection of the state, and managed by a body of religious women, as they are here, whose lives are wholly devoted to its duties, and acting from high Christian motives, they are of the greatest utility and necessity. There are rarely more than fifty or sixty children at one time in this institution, as they are generally sent into the country soon after they are received. The Italian, perhaps I should say continental custom of swathing, strapping, and bandaging, prevails here to its fullest extent; and it is difficult to understand how any of these little animated mummies ever survive the treatment. The institution furnishes an excellent opportunity of seeing cases of congenital or transmitted diseases; of these, scrofula and syphilis are the most frequent; *ophthalmia neonatorum* is also quite common, and not a few lose their sight entirely. I doubt whether sufficient care is always taken to prevent the communication of this malady, although neatness, cleanliness, and good order appeared to prevail in every part of the establishment. The register shows great care in noting down every particular in regard to the reception of the child, as the day of the month, the hour of the day, its name and parentage, if any be given, and, in addition, a crucial incision is made on the top of the right foot, and a black dye introduced, which remains indelible. The clothes are minutely examined to see if there be any mark, ribbon, coin, or medal, by which the child may be afterwards identified, and if there is, it is carefully preserved, and a record made of it. If there is no evidence that the child has been baptized, it is taken to the church at once, and the rite there administered. There are three large rooms occupied as nurseries, each containing about fifty beds for the nurses, each bed having a cradle on each side of it. One of the rooms is used exclusively as an infirmary. There is no difficulty in finding plenty of nurses, as there are certain days of the week appointed for applications to be made; all applicants being obliged to bring certificates from their parish priests and deputies as to character, age, health, capability, and means, and also, which is no less important, in regard to the birth and death of their own children. The chief reason assigned for the latter is, that otherwise women might send their own children to the asylum, and afterwards apply and support them at the expense of the institution. On receiving an infant the nurse is presented with sufficient clothing, marked with the sign of the cross, and is paid at the rate of one dollar a month for fourteen months; after that time nursing *a pane*, as it is called, commences, and is continued till the age of twelve for boys and of ten for girls; for the first six months at the rate of sixty cents a month, and after that forty till the time expires. It is said that the nurses have a stronger affection for the boys than for the girls, and take better care of them in hope of adopting them when they are grown, and deriving advantage from their labor. When the time is expired the boys, if not adopted, are sent to the orphanage of the city of Viterbo (*S. Maria della Providenza*), where they are maintained, clothed, educated, and instructed in some trade or art till the age of twenty-one, when they are furnished with ten dollars, and dismissed to make their way in the world. Where a boy is bound out or adopted, obligations are required that he shall be trained and educated in the same manner and until he arrives at the same age, when he is to receive the same sum, and may remain in the family or go where he pleases. In regard to girls, they must be supported in the families where they are received till they are married or enter a convent; if married, they are to receive twenty dollars, but as there are various dowries established for illegitimate girls, a most benevolent and praiseworthy provision, they may receive a hundred dollars or more, which is no small fortune in Italy. After the girls are weaned, they are returned to the institution, as a general rule, where they form a large establishment of several hundred, and where they are carefully trained and educated; and if they marry, each one receives a hundred dollars. Many kinds of feminine work are carried on in the institution, such as sewing, knitting, embroidery, etc.; the manufacture of wool and hemp was introduced, indeed, at a very early period in its history. One cannot walk through the departments of the adult female foundlings without a feeling of satisfaction and real pleasure, for they are models of neatness and good order, while the occupants are cheerful, industrious, and tidy. In one apartment we see them pursuing their studies, in another their work, in another still, they are receiving religious instruction from some of the nuns. Thus are these poor abandoned children nursed, watched over, trained, educated, and provided with a dowry; in short, everything done that is possible to compensate for a parent's care and affection, and even to efface the ignominy of an ignoble birth. The whole system is only Christianity in action, and does honor to the church which originated and carries it on. Indeed, it is due to truth and justice to say that the Catholic church has, from the earliest ages, paid much attention to the protection and education of exposed or abandoned children, whatever their origin or parentage. It was even made a subject of earnest discussion in various Councils as far back as the fourth century, or even earlier. The tenderness and compassion of Christian affection were substituted in the place of pagan cruelty, neglect, and remorselessness, and we find Constantine, the first Christian emperor, devising measures to assist those who, from poverty or other causes, could not support their children. One motive which evidently influenced him was to prevent infanticide, a very common crime at that period, and one that we find to have been generally practised, not only throughout Greece, but every part of the then known world. Early records show, moreover, that it was common in the early history of Greece and Rome, and was not regarded as a criminal act. It was an archbishop of Milan, in the year 995, who opened the first asylum for foundlings, and that in his own house. Not only this: he left all his wealth for its support, directing in his will that the children should be maintained till the age of nine, and then taught a trade. Pope Innocent III., also, in the twelfth century, collected all abandoned children, whatever their parentage or origin, and opened an asylum for them in a department of a building which he had prepared as a hospital for the sick; and in 1638 St. Vincent de Paul, who is justly regarded as a saint by the catholic church, opened a similar institution in Paris; and it was not till the following century that London followed the example.

P. S.—This is the rainy season in Rome; the weather, though mild, is not favorable to invalids, it being wet, damp, and chilly. There are many strangers here laboring under or threatened with pulmonary disease; but the crowded state of the Protestant burying-ground and the early ages of most of the deceased, show that this climate is no panacea, and that many, at least, of those who come here for health find it only a final resting-place.

THALLIUM.—The largest ingot yet produced of this new metal was lately exhibited at the Royal Institution, London. Its weight was 5,943 grains.

American Medical Times.

SATURDAY, JULY 18, 1863.

LIFE-SAVING IN WAR.

BATTLES more sanguinary than the series of terrible conflicts that had preceded during the two years of war have just been fought near the head-waters of the Potomac. From thirty to forty thousand veteran soldiers were numbered among the killed and wounded. Nearly two hundred thousand men were pitted in hostile array, and three hundred cannons thundered the murderous voice of battle. The national army triumphs, and though it proudly adds the enemy's hecatombs to its own wounded, the Surgeon-General unhesitatingly assures the public that his Medical Directors have "plenty of *surgical* aid."

Before Vicksburg, and the Gibraltar of the Mississippi, other armies, corresponding in magnitude to the army of the Potomac, have successfully undertaken the serious task of siege operations; while upon the Tennessee, and at various points in the South, the loyal troops are vigilantly pressing forward. Skirmishes, sharpshooting, hideous shells, explosive mines, trench work, with unceasing vigil and labor, yet fail to overcrowd the field-hospitals or overburden the medical staff.

The present condition of the national forces, vast as the numbers are, is demonstrating the sanitary advantages of great activity in armies. An unusually good state of health prevails among all our forces. And now have come the notable occasions when the surgeon's skill is appreciated above all rank and military titles; for the prowess of that skill is readily and gratefully acknowledged amid the battle scenes where death is braved, and surgery's boldest acts are with equal fortitude demanded by heroic men. Truly has it been said that "Chirurgery triumphs in armies and in sieges—'tis there its empire is owned, 'tis there its effects express its eulogium." But let us not mistake what constitute the highest triumphs of surgical art.

For the sake of humanity, and for the honor of our profession, we hope that the passion for "high surgery" and capital operations, for vainglorious purposes, has no chance for indulgence upon the recent great battle-fields. The wounded heroes of battle, and the people in whose behalf the war is waged, will bestow honor and gratitude upon those surgeons who best succeed in *saving life*. Already has the simple record of many a humble military and hospital surgeon made him the unconscious subject of honorable mention in official and professional circles, and the object of the fervent gratitude and prayers of those who have experienced or learned of his faithfulness and skill in saving the lives and the limbs of his patients. The successful and conservative surgeon, whose judicious and humane appreciation of the methods, time, conditions, and place of necessary operations, is fully equalled and scrupulously accompanied by most faithful attention to all the hygienic conditions and appliances that influence and determine the results of wounds and surgical operations, is now the surgeon most honored. At Cedar Mountain, and during the disastrous battles that were arrested at Chantilly last year, was seen an efficient and modest young medical officer absorbed in the duty of providing for the proper nourishment and hygienic care of the wounded as they fell and were gathered to the ambulances and field-hospitals. To that duty he had been assigned in a certain *corps d'armée*, and with marvellous success did he succeed in supplying much-needed nourishment and stimuli to the thousands of wounded men who were being brought in and moved forwards from day to day. His charge related wholly to the principal hygienic wants of the wounded as they were temporarily gathered by the ambulances, and moved forwards by railway. A few weeks subsequently, in a sheltered oak-opening upon the Antietam, in a field-hospital, with only tents for the covering of his patients, the same unpretending surgeon was found wholly absorbed in charge of a small division hospital filled with severest wounds, which presented such results alike of good surgery and perfect hygienic care as we never witnessed in civil hospitals. The excellence of his administration and his surgical skill soon brought official orders for placing a thousand patients under his care; and unconscious of the honor he was winning, that surgeon gave his whole attention to the work of life-saving by the only sure means of complete hygienic care following wisely elected operations or avoidance of operations. His was a model field-hospital, and the almost unparalleled success of his surgery taught lessons that no surgeon who visited his "hospital in the grove," felt unwilling or too old to learn. The number of precious lives saved by that humble officer's intelligent comprehension and faithful execution of his peculiar duties during the two brief campaigns of last autumn, will cover him with truer glory than that of storming a series of batteries; and we adduce this instance of professional faithfulness simply to illustrate our subject in reference to a particular field.

It is as honorable to our profession as it is creditable to humanity, that the head of the Medical Bureau, and the Chief Directors of the Staff, are giving great attention to measures for insuring the best results of operative surgery, and the greatest effect to conservative means for diminishing the amount of capital operations. Life-saving by hygienic means, as well as by wisely elected operative measures, is producing results in the field, as well as the general hospitals of the army, such as will command the attention and respect of the medical world. The unfortunate presence of a few renegades and charlatans in our regimental service will not be allowed to greatly modify the general results, for such unworthy officers are readily kept *sub jugum* by their superiors. Yet we have seen enough of bad work in the care of the wounded after the great battles, to lead us to implore again all our medical officers to double their diligence in the hygienic and conservative measures that are so essential to life-saving in the field-hospital and the surgical ward.

But great as the fields, and vast as the opportunities are for the redemption of life and of limbs from the carnage of battles, where

> ". . . . For want of timely aid
> Thousands die of medicable wounds,"

there is another and far greater field in which much life has been cruelly wasted during the progress of the present war, a field in which, indeed, more lives have been sacrificed than upon all the battle-fields. And this murderous Aceldama is far away from the seat of war and its exposures and life risks. It is at home—in our recruiting offices, our barracks, quarters, and encampments for enlisted men in the States, and at the various military depots.

In three successive years three immense armies of volunteer soldiers have been called into the national service. Unaccustomed to camp and military duty, fresh from the avocations of common life with all its comforts and luxuries, upwards of a million citizen soldiers from the loyal States have already passed through severe campaigns and many sanguinary contests. And now another grand army is about to enter into the terrible struggle. Three hundred thousand strong, this freshly marshalled host is to be added to the veterans in the field, and be thrown upon the rebel forces at the South.

The new army, like the soldiers who have preceded it, will represent the homes and hearts of the people, and the hope of the nation; and, in even larger measure, will it represent the intelligence, virtue, and wealth of the land. In the name of the people, and on behalf of the homes, the affectionate hearts, and the priceless interests of the nation, which the army thus truly represents, its strong arms and devoted souls not only ask to be so led as to confront successfully the rebel forces, but to be so treated and so managed in camp, in drill, in discipline, and upon the march, that the precious lives of those volunteers shall not be wasted, nor the martial strength of the forces fail when the days of trial come.

Already in the progress of the war the number of soldiers discharged from service upon the surgeon's certificate amounts to considerably more than one hundred thousand, while the average constant percentage sick in hospitals from other causes than wounds, in all our armies, is probably about *seven per cent.* of the entire force. What proportion of the invalid discharges from service, or of the hospital population, has thus far been comprised of the classes of enlisted men who either were primarily unfit for military service, or who from the insanitary management of recruits were broken down previous to active service, we trust will be faithfully shown by the statistical bureau of the Sanitary Commission, and the Medical Department of the Army. It may safely be estimated that fully *sixty per cent.* of the invaliding and sickness has been due to those readily removable causes; while of the deaths from disease it will be found that a still larger percentage of the total number has been due to that class of evils to which we now allude. One of the Sanitary Commissioners ascertained upon personal inspection and inquiry, that of nine thousand select and rapidly enlisted troops that last arrived at the New York rendezvous from New England, about *thirty-three per cent.* were placed upon the sick list within a few weeks after entering the barracks in the vicinity of this city, and that upon their departure to the seat of war, nearly *thirty per cent.* of the original force was left behind as invalids. This corresponds with the statement made by the colonel of one of the best regiments that was ever quartered at this rendezvous, who, after seven weeks' residence here, deliberately replied that during that brief period the military strength and value of his regiment had been *permanently* diminished *thirty per cent.* upon the force it actually possessed the day it entered the stifling quarters provided for his men in this city.

A visit to the old barracks at East New York, at Camp Washington, or Camp Curtin, will convince any intelligent physician that a residence of full corps of recruits for a few weeks in those quarters must be a more terrible ordeal to life than any exposures our armies have yet suffered upon battle-fields. And we believe we do not exaggerate when we assert the opinion that nearly one-third of all the effective force of the army, as hitherto enlisted, is needlessly wasted and lost before the freshly recruited regiments have reached the seat of war.

This is an evil that may and should be arrested immediately. The responsibility rests upon the Governor and Military Staff of each State, as well as upon the mustering officers and quartermasters of the U.S. Army concerned in the care of the new levies at the military depots. Let the united influence of medical men in all the States be directed to the reform that is so much needed in the early management and care of the grand army that is now being levied, for without such volunteered effort on our part the reform will not be effected. Let us appeal to the Surgeons-General in the States, to the Quartermasters, to Governors, and all the responsible authorities. Our brothers, neighbors, and friends, and not a small percentage of our own profession, are to constitute this last grand army; and against the wholesale slaughter and the slow poisoning of such a host of patriotic men, as they will be rapidly gathered at each military rendezvous, let us solemnly protest, while we do all in our power to enlighten and aid the proper authorities in the work of *life-saving* by improvements in encamping-grounds, the ventilation and enlargement of barracks, the ventilation of tents, the care of camp cuisine, etc. And in this work we must look to the Medical Bureau and to the Sanitary Commission of the army for their effective aid. We know that the Sanitary Commission has been continually appealing to the War Department to remedy the very evils we have here mentioned. Its appeals, with its intelligent statements and plans, must now be enforced by the united influence of the entire profession; for life-saving and patriotic service for our country are the paramount duties of every physician.

THE WEEK.

The sanguinary battle of Gettysburg illustrates again most painfully the importance of a large reserve force of surgeons and assistants on a battle-field which our forces immediately relinquish to pursue the enemy. The army is amply provided with surgeons, if they were allowed to remain and care for their wounded. But in this and many other instances the army has at once moved, and the surgeons are obliged to follow their commands. Under these circumstances the immense number of wounded are necessarily left without succor or surgical aid. Hundreds were unattended at Gettysburg for days. It seems important to devise some system by which this deplorable neglect of the wounded may be obviated. We have before suggested the selection, by the Surgeon-General, of a sufficient number of competent surgeons in civil life, each provided with a proper number of assistants, who shall visit the field while the battle is in progress, and remain until the wounded are thoroughly provided for. If such a corps of surgeons were selected and properly commissioned, a great evil would at once be remedied.

The circular of the Surgeon-General, published in this

Journal for July 4th, asking information in regard to the use and abuse of calomel and tartar emetic, was intended exclusively for circulation among army surgeons. We learn that the returns thus far made show a striking preponderance of opinion against the general use of these remedies in the army. The value to be attached to these opinions is very great, and conclusive on the subject. We shall look with interest to their future collection.

Correspondence.

SARRACENIA PURPUREA IN SMALL-POX.

[To the Editor of the American Medical Times.]

Sir:—Something like a year ago I saw an article in the *Tribune* in regard to the use of the Sarracenia purpurea in variola. I made a minute of it in my note-book, with a view of giving it a trial at the first opportunity. That opportunity has occurred, and I have tried it, with what success the following case will show.

Monday, May 18th, 1863, was called to see W. C., a young man twenty-three years of age, strong and vigorous constitution. Found him with all the premonitory symptoms of variola; the lumbar pains being particularly prominent. He had been exposed to that disease eight or ten days before. Does not remember ever having been vaccinated.

Tuesday, 19th.—Fever higher, and pain more severe; eruption beginning to appear. I gave him the usual treatment, but without going over all the details of the case, suffice to say that on Saturday 23d there was a copious eruption of pustules about the size of small split peas diffused over the whole body, particularly on the hands and face. The latter was so swollen as almost to close the eyes; the eruption being so thick even at this stage as to look like one great pustule. More or less delirium during the night, and the severe lumbar pains undiminished. It now occurred to me to give the sarracenia a trial; as it was growing in abundance in a marsh near the house I sent out and procured some of the roots, and directed the nurse to give a teacup two-thirds full of the decoction every four hours.

Sunday night, 24th.—Saw him again. Had been delirious the night before, but now calm; pulse slow, skin cool, and many of the pustules shrivelling. From this time the disease never advanced, but all the pustules dried up without maturing. There was no pitting. "One swallow does not make a summer," and I would not pretend to claim from this one case that the sarracenia is a specific in this loathsome disease. Let other physicians give it a trial, and report the result. Should further trial prove it successful in cutting short the disease it would confer a blessing on the human family equal to the discovery of Dr. Jenner.

Yours, etc.,
Samuel Mitchell, M.D.

Cameron Mills, June 23, 1863.

HOSPITALS FOR OPERATIONS.

[To the Editor of the American Medical Times.]

Sir:—I see that in the Times for May 16th a "Surg. Vols." takes great exceptions to my remark: "In our General Hospitals, as at present arranged, the Medical Staff is too small to be in condition, as to time (to say nothing of skill, etc.) to perform all the operations that should be performed." In a communication in the Times of April 18th, in respect of the necessity for "Hospitals for Operations," he says:—"The sweeping charge of incompetency, as applied to the Army Medical Corps, is not only unprofessional and ungenerous, but it is unjust; yes, more, it is false." This "sweeping charge," he thinks, if I do not wholly disregard truth, and will refer to the Army Register," I "will withdraw." As I made and intended to make no such "charge," I have nothing to "withdraw." I wrote from the Department of the Tennessee (near, or below, Memphis), but the printer located me at St. Louis, Mo. I referred to comparatively local matters—"Surg. Vols." considers that I make a sweeping charge of incompetency against the *whole* "Army Medical Corps."

In November last, Surgeon H. R. Wirtz, U.S.A., Medical Director of this Department, thought it necessary to appoint a Board of Medical Officers to examine physicians serving either in hospitals, or with troops in the field, to test their competency. "Physicians under contract will be duly notified when to appear before the Board." Every "Physician under contract" in the Department, composing in large part the Medical Staff of our General Hospitals, was to be examined, and such commissioned Medical Officers as were reported by their Division Surgeons. The Board did not act, as the Assistant Surgeon-General did not approve of the idea. I still maintain the opinion that our Army Medical Corps will be more efficient when "Hospitals for Operations" are a part of the system.

I have always felt and professed a high respect for the Medical Corps, U.S.A. and U.S.V. Incompetent men are to be found in both classes.

P * * * *,
Department of the Tennessee.

ANATOMICAL DEVELOPMENTS OF PARTS LIABLE TO OBSCURE THE DIAGNOSIS OF OBLIQUE INGUINAL HERNIA (By order of the Surgeon-General).

[To the Editor of the American Medical Times.]

Sir:—It might be of interest to the profession, and especially to military surgeons, and of practical use, to call attention to an anatomical development of parts liable to obscure the diagnosis of oblique inguinal hernia. The following case is a good illustration of it.

Pension Office, November 13, 1862.

Sir:—J. D. has been ordered to report to you for examination as to his degree of disability, and present physical condition. You are also requested to learn from him the history of his disease.

Respectfully yours,
(Signed) Jos. H. Barrett,
Commissioner.

Dr. R. S. Satterlee,
Grand St., New York.

Army Medical Purveyor's Office,
466 Broome St., New York,
November 21, 1862.

Hon. Joseph H. Barrett,
Commissioner of Pensions.

Sir:—J. D. presented himself to-day and was examined. His history of his alleged injury is as follows:—In November, 1861, when on drill, he felt pain for the first time in his groin, and on examining he found a tumor there. The tumor or "rupture," as he supposes it to be, he says is on the right side only.

The present examination reveals an apparent tumor, of equal extent, on each side. These tumors or enlargements have a conoidal shape, and extend from the neighborhood of the anterior superior spinous process of each ilium to the spines of the pubes, the apex downwards. From a superficial examination the conclusion might be that he has a double inguinal hernia. But when he coughs the protuberances seem largely inflated, the bands of fibres of the abdominal muscles are distinctly marked, and though the apparent tumors descend to the external abdominal rings, the fingers when placed in the rings are not sensible of a hernia, and when the coughing ceases the protuberances return to their former condition, or disappear.

The conclusions are that the man has not hernia, that the appearance of it is due to unusual anatomical developments, and that the malformation is congenital.

His physical condition otherwise is good.

Very respectfully,
Your obt. servant,
R. S. Satterlee,
Surgeon U.S.A.

This is one of several cases that have presented themselves at the Medical Purveyor's Office, for examination for certificates of disability for pension.

The anatomical deviation is an unusual thinness of the aponeurosis of the external oblique and the fascia superficialis and superincumbent integuments, or undue development of the fibres of the internal oblique that arise from the anterior part of the crest and anterior superior spinous processes of the ilium, and from Poupart's ligaments. It occurs on one side or on both.

Yours, etc.,
L. F. Hammond,
Surgeon U.S.A.

TRANSPORTATION OF COMPOUND FRACTURES OF LEG AND THIGH.

[To the Editor of the American Medical Times.]

Sir:—The question often arises as to the best method for the transportation of cases of compound and comminuted fractures of leg and thigh.

The plan I have recommended and adopted with entire success is to place compresses made of straw, hay, leaves, husks, or even sand-bags, between the legs and thighs. After drawing the broken limb down to its normal length, apply the compresses, and fasten it to the well one, by means of a bandage cast lightly about them both—thereby making a splint of the sound limb. In this manner these patients can be removed for miles in ambulances, and changed or handled with less injury, discomfort, or inconvenience than with any other dressing with which I am familiar. The only care requisite is to see that the subsequent swelling from inflammation or infiltration does not destroy the vitality of the parts; cold water and the reapplication of the dressings will obviate this danger.

Yours, &c.,
John Swinburn, M.D.

Albany, N. Y., June 30, 1863.

Medical News.

Commencement of the Long Island College Hospital.—This young and vigorous medical school closed its fourth session on Thursday, the 2d of July. The number of matriculants during this term was fifty, representing fourteen different States, and the number of graduates was sixteen. The President, Theodore L. Mason, M.D., briefly addressed the audience, reviewing the past history of the College, and alluding to its future prospects. Although the class was diminished in 1862, as was the case in all medical colleges, yet during the present term it had increased to near its maximum size. He concluded by explaining the nature of the diploma about to be conferred, and the moral and legal obligations which it conferred. The Hippocratic oath was administered by Dr. Mitchell, when the President conferred the degree of M.D. upon the following gentlemen:—Alfred W. Merrill, New York; Albert Crane, Louisiana; John G. Kalback, Pennsylvania; Henry W. Good, Pennsylvania; James McMillan, New York; A. Jackson Sanders, Pennsylvania; Robert Newman, New York; Gorham E. Sargent, Massachusetts; Adam B. Dunder, Pennsylvania; E. R. Moody, Kentucky; George F. Burton, Delaware; Alexander J. C. Skene, Scotland; W. J. K. Kline, Pennsylvania; Benjamin R. Taylor, New Jersey; John A. Webster, Iowa; Philip McNab, Indiana.

The honorary degree of M.D. was conferred upon Darwin G. Eaton of the Packer Institute.

Professor Austin Flint, M.D., made the address to the graduating class. He welcomed them on behalf of the Council and Faculty, to the practice of medicine and surgery. He reminded them that there was a broad field before them in the army and in private practice. He spoke hopefully of the prospects of the College, and remarked that although the four years of its existence have been filled with troubles incident to the political condition of the country, the state of its health is beyond question—it is no longer a weakly bantling, but a healthy and vigorous body. He proceeded at considerable length to point out to the class the useful discoveries of Hunter and Jenner, and bade them emulate these men in adding to science something to benefit the human family, and immortalize themselves.

The valedictory address on the part of the graduating class was by Alfred W. Merrill, of New York. The speaker took the most elevated view of the dignity of his profession, and in truthful and eloquent terms urged his associates to aspire to an honorable distinction.

Hon. Samuel Sloan (President of the Board of Trustees) in a feeling manner declared his intention to retire from the presidency of the College. This he regretted very much, but his removal to New York rendered it necessary. He reminded his Brooklyn friends that they did not properly appreciate the benefits conferred by the Long Island College Hospital. It had sent surgeons to the army, and its graduates honored them in every walk of life; yet it owed a debt of $25,000. To liquidate this debt he would willingly subscribe a thousand, or, if necessary, two thousand dollars. He trusted others would come forward and relieve the institution of its debt.

At the conclusion of the services the students and faculty were elegantly entertained at the residence of Dr. Henry.

Operations for Hard Cataract—Results of Extraction and of Depression or Reclination.—There are four compilations of statistics relative to the results of operations upon hard cataract. Their conclusions do not exactly correspond, although they do not vary very widely. By adding them together their errors may balance, and the result be a close approximation to the truth.

OPERATIONS FOR CATARACT.

	By Extraction.	Failures	Ratio.	By Reclin'tion	Failures	Ratio.
Frederick Jaeger.	728	33	1 in 22	129	21	1 in 6
Edward Jaeger.	114	7	1 in 16	81	12	1 in 7
Arlt.	540	41	1 in 13	82	14	1 in 6
Rivaud-Landrau.	2073	201	1 in 10	177	50	1 in 3½
Total.	3455	282	1 in 12	469	97	1 in 5

Stated in another form, the number of failures after extraction of hard cataract is eight per cent., while of reclination or couching the number of failures is twenty-one per cent. By failures are meant cases where sight was totally lost. After extraction the pupil may be closed, and, for the time, sight not be restored: an iridectomy may afterwards impart vision. Such cases are not counted failures. In reclination the immediate result may be successful, while after a few months chronic choroiditis or retinitis may be set up by the presence of the lens in the vitreous humor, and eventuate in softening and atrophy of the globe. The failures in reclination may be more or less remote, those of extraction follow immediately. The successes of reclination are liable to a disastrous issue years after the operation: the successes of extraction are permanent.—H. D. N.

Original Lectures.

DISEASES OF THE RESPIRATORY ORGANS IN CHILDREN.

BEING A COURSE OF LECTURES PREPARED FOR DELIVERY DURING THE SPRING SESSION OF 1862 IN THE COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.

BY THE LATE
C. VAN ALEN ANDERSON, M.D.,
PHYSICIAN TO CHILDREN'S DEPARTMENT, DEMILT DISPENSARY, N. Y.

LECTURE IV.—PART II.

PERTUSSIS—ITS COMPLICATIONS.

Many of the complications of pertussis have their seat in the lungs, so that it is a necessity to us, in treating a case of this disease, to be well acquainted with the condition of our patient's chest. If we auscultate during the first, or catarrhal stage, we shall discover the mucous or sibilant rhonchi which are the exponents of a slight bronchitis; on percussion, also, we shall find the thorax clear and sonorous. There is no slight difficulty in applying the ear to the chest during the paroxysmal cough of the second stage of hooping-cough, but if we succeed in our efforts, we shall recognise the vibrations given to the trunk, and, in the intermissions between the expulsive shocks of the cough, a partial sonorous râle, or a roughened respiratory murmur. The hoop is produced in the larynx, and at the moment it occurs the air does not pass beyond the larger division of the bronchi, so that during its continuance the vesicular murmur will be absent. It is therefore of prime importance to auscultate the chest of the little patient at a period of time sufficiently removed from the termination of the paroxysm, when we shall hear the usual puerile respiration of children, mixed with some dry or moist sounds of the larger air tubes. Let me remind you, also, that you should neither count the pulse nor practise auscultation *just before* a paroxysm, for then you will remember that there is a considerable disturbance both of the respiration and circulation.

Dr. Roe explains the cough and the hoop in the following manner:—"Any one who will make the experiment will perceive that, by the exercise of the voluntary muscles of respiration, he cannot either continue coughing loudly for so long a time, or empty the lungs so completely of air, as a person does in the paroxysms of hooping-cough; it must therefore be inferred that the involuntary muscles . . . . . . connecting the extremities of the cartilaginous rings of the trachea and bronchi, powerfully assist in accomplishing both these objects. They seem, by acting spasmodically, to expel the air from the lungs, and to excite by sympathy the voluntary muscles of inspiration; the combined action of both sets of muscles appears to produce this peculiar cough. The hoop takes place in the larynx and trachea, and appears to be caused by a rush of air through a contracted passage, for no sudden or violent inspiration could produce this sound in the natural, healthy state of the air tubes. The lungs are so completely emptied of air by long-continued expirations, that a most distressing sense of suffocation is produced, to relieve which a full inspiration is instinctively made, and at the same moment the rima glottidis is contracted, and the air passing quickly through a very narrow opening causes the hoop."

If we make three stages of the disease, we may consider this paroxysmal condition as existing from fifteen or twenty days to one month, and then comes the period of decline. Before this commences, the cough has been much more severe at night than during the daytime; but now we begin to observe a diminution of the nocturnal exacerbations, which is one of the earliest signs of the subsidence of the disorder. The fits of coughing grow less in frequency and intensity; they now occur but four or five times during the day, and rarely at night: they possess a catarrhal tone, lose by little and little their convulsive disposition, and are no longer accompanied by hoop. The inspirations become easy and tranquil; the vomitings cease, and are replaced by the expectoration of a thick, greenish mucus.

Sometimes the kinks and hoops are reproduced by trifling causes, such as fright, severe pain, anger, etc., and this proclivity may be seen for several months after the child appears to have entirely recovered. The duration of the third stage presents great differences: in a simple case of pertussis it is usually short, ten or fifteen days; but where the disease is complicated, it may be some weeks or months.

During an attack of hooping-cough, if it be not associated with other diseases, the child's general health continues good, the appetite and the function of digestion are unimpaired, but it may yet be thin and pale from the constant rejection of the food by the stomach. An ephemeral fever is sometimes observed, but in the majority of cases there is complete apyrexia. The circulation may be deranged by the excitement of the cough, and the same cause may give rise to a more or less profuse sweating. Some children retain their cheerfulness throughout; in others the spirits are unequal, sometimes depressed. The disease goes through its three stages in from one to four months, the common notion being that it is six weeks coming to its height, and six weeks in going off; but any such precise computation as this is, of course, without foundation.

The progress of hooping-cough is occasionally different from the description that I have given you. The varieties are generally either in its intensity or in the return of the attacks, which sometimes assume an intermitting type; the violence of the cough, also, among very young children, may bring on fatal convulsions.

The first, or catarrhal stage, does not always disappear so quickly as I have mentioned to you; for at the commencement of an epidemic of pertussis, or towards the close of one, it is not unfrequently greatly protracted; for epidemic hooping-cough, as we have seen, is sometimes developed from epidemic catarrh, and the long continuance of this latter disease is often the first warning we have of the invasion of the former. This catarrh, also, may be accompanied by fever, dyspnœa, and many of the symptoms of severe bronchitis. In such cases the discrepancy between the constitutional disturbance and the auscultatory signs will often puzzle us, until in the progress of the disorder the peculiar phenomena of hooping-cough make their appearance. There are other eccentricities which you will notice in the course of your medical experience. One of the stages may be wanting, the first for instance, or the last, that of decline; and far more rarely you will see children who do not have the convulsive period, but suffer from violent fits of coughing without any hoop. Usually, however, you will meet with three forms of the disease:—One which is rapid in its progress, recognised by marked febrile phenomena and frequent hæmorrhages; one which presents rather symptoms of intestinal and gastric derangement, such as disorder of the bowels and repeated vomitings; and lastly, one in which the convulsive stage is developed in the highest degree.

The diagnosis of pertussis is easy in the generality of cases. It is distinguished from other disorders by the convulsive expiratory cough, and by the crowing inspiration or hoop. During the catarrhal stage we have no means of making an accurate diagnosis of the nature of the disease, though the prevalence of an epidemic, the liability of our patient to contagion, and the fact of his not having previously had pertussis, are circumstances which demand our attention. When the convulsive stage is fully established, we can in almost all cases be sure of what we have to deal with, yet we may even then confound it with a form of bronchitis accompanied by spasmodic cough, or with tuberculosis of the bronchial glands. Acute bronchitis of this kind, however, commences suddenly with the peculiar cough, and has no preceding catarrh; the kinks are shorter, and more intense; there is no hoop, no expectoration, and no vomiting; the disease begins with fever and accelerated respiration, which increase with its progress; there are mucous, sibilant, or sub-crepitant râles at all times; the symptoms are continuous, and it may occur several times in the same individual. From tuberculosis of the bronchial glands we may distinguish it by the following symptoms of the last named complaint:—It is neither contagious nor epidemic; it has no distinct stages; the fits of convulsive cough are very short, not terminating with a hoop, expectoration, or vomiting; there are physical signs of tubercular trouble; the voice is often altered; there are hectic symptoms, and its course is chronic in its character.

The prognosis of simple hooping-cough in a child of fair constitution is favorable. The epidemics of the present day have none of the severity of those described by the older authors, and most of the danger to be apprehended is from the supervention of some complication. In rare instances in young and feeble children, the violence of the kinks may prove fatal. In autumn and winter the disease is more severe and more prolonged than it is at other seasons.

In the first stage, of course, it is impossible to form any prognosis; during the second only can it be done, and then it is imperatively our duty to remember that it is at this epoch that intercurrent diseases appear. Sometimes they commence suddenly, and without any known cause, when we have no reason whatever to suspect their existence, and in these cases the issue of the disorder is doubtful, and our opinion must be guarded accordingly.

Almost any disorder may occur during the progression of pertussis, from bronchitis to idiocy. There are, however, some which are more frequent complications than others, and as these are often met with in practice, it may perhaps be worth while to consider briefly the time at which they are remarked, their form, their advance, and their prognosis.

As might naturally be expected from the nature of the disorder, convulsive seizures frequently occur during its course, such as spasm of the glottis, and the phenomena that are known under the general designation of "convulsions." The accession of these nervous troubles may be so sudden and unannounced that you are startled by it. A child, to all appearance suffering only from severe hooping-cough, is all at once taken with a fit of convulsions, and dies of spasmodic closure of the larynx, and consequent congestion of the brain. Or else, after a particularly violent paroxysm of coughing, you observe that curious symptom which we have already noticed in spasm of the glottis, namely, a contraction of the thumbs and great toes. At first these signs are slight, but they convey to your mind the apprehension of graver trouble which is to follow. A degree of dyspnœa comes on after a while, the carpo-pedal contractions become permanent, the breathing grows hurried and irregular, the hoop disappears, the cough has a smothered sound, the surface has the lividity due to imperfect respiration, the child sinks into stupor with dilatation of the pupils and twitching of the superficial muscles, and finally expires in convulsions.

Vomiting that exists for twenty-four hours independently of the cough, of the remedies that you are employing, and not connected with obvious gastric disorder, is a symptom that should always direct your attention to the head. You will find that the child daily grows more heavy and drowsy; complains of headache, has an increase of dyspnœa before and after the fits of coughing, and has perhaps some hæmoptysis or hæmatemesis. After this condition has continued for a time, convulsions ensue, which either kill the little patient at once, or else leave him in a comatose state from which he never revives.

These convulsive seizures are more frequent in young children than in older ones; they are connected in many cases with the irritation of dentition, but are not by any means confined to that period. It is during the second stage that they are observed, and particularly when the cough is very intense, and the child has been laboring under it for some time. Sometimes they arise during the intervals of coughing, at others during the cough itself.

Hooping-cough and measles are the two diseases of infancy and childhood which show the strongest disposition to pulmonary complications. The bronchitis and pneumonia of pertussis are unfortunately both frequent and fatal. They are met with at all ages, and in all the three stages of the disorder, though, in general, we find them in the second. When they occur during the first stage, it may be extremely difficult to make a correct diagnosis; but the catarrh which has been manifested at the commencement continues on into the second period, and is marked by a greater amount of constitutional disturbance, quick pulse, high fever, loss of appetite, and incessant cough and dyspnœa. When these symptoms come under our notice, auscultation and percussion will reveal to us the true nature of things, and enable us to decide that we need be under no anxiety, for the inflammatory complaint usually subsides in the course of a few days.

Those cases are much more serious in which, after the peculiar symptoms of the convulsive stage of pertussis have declared themselves, bronchitis or pneumonia appears. In some cases, after the ordinary catarrhal fever has subsided, a hoop has been heard accompanying the cough at intervals; when suddenly the child becomes feverish and restless, the skin grows hot, the pulse and respiration are permanently quickened, and the latter is somewhat difficult; the hoop at the same time grows louder, and the cough is aggravated and distressing, and not attended with much expectoration, whatever mucus is thrown off being streaked with blood. On applying our ear to the thorax we hear a coarse, moist râle over both lungs; on a deep inspiration smaller sounds may be made out, and percussion is resonant. As the disorder progresses the cough will become less frequent, losing both its hoop and its spasmodic character; the respiration increases in wheezing and dyspnœa; the fever continues; the pulse becomes very rapid, small, and feeble; the cheeks and lips purple, the surface cold and moist, and death speedily ensues. Dr. West remarks, that cases of this kind more rapidly terminate fatally "than any form of affection of the lungs which comes on in the course of hooping-cough." He has seen "a child die on the sixth day from the first appearance of any indication that the disease was other than a very mild attack of hooping-cough;" and says, "it will not surprise you that the fatal event should take place so speedily, if you bear in mind that after death we discover intense injection, even of the smaller bronchi, with copious effusion of pus into their cavities, or very extensive vesicular bronchitis, or both conditions together."

Instead of having bronchitis or pneumonia at this early period, they occasionally come on later, and seem to be developed out of the pertussis. In such cases the symptoms gradually increase in severity, and, though the hoop is unchanged, the cough grows more frequent, and the child's sufferings greater. His face becomes anxious, his eyes watery and injected, his respiration habitually hurried, irregular, and wheezing. At the same time there is a more or less coarse râle over both lungs. The disease is usually chronic in its advance, and may terminate either by the interference of cerebral disorder, or else may go on to recovery. Sometimes the inflammation extends by continuity of tissue into the smaller air tubes, and thence to the substance of the lungs, giving rise to pneumonia; sometimes the child dies exhausted from a fit of coughing; and sometimes after the fever has increased, and the emaciation become extreme, the little child passes away in a tranquil slumber, ceasing to live because its tender vitality is exhausted.

We do not very often witness this complication of the disorder in its third stage; it then simulates very closely pulmonary tuberculosis, and we are forced to make our diagnosis by a careful consideration of all the symptoms.

The duration of secondary bronchitis or pneumonia is variable, but depends much upon the age of the patient; in very young infants it is exceedingly short, as they quickly succumb to the attack of such powerful adversaries, and the fatal termination is hastened by the access of convulsions. From three to five years we may take a more cheerful view of this complication, although it is still a very serious one, particularly when the hooping-cough has been preceded by measles. "However," remark Barthez and Rilliet, "however grave they may be in appearance, whatever resemblance they bear to tuberculosis, it is never necessary in these cases to lose all hope. We have seen real miracles produced by change of air, in cases where everything seemed to indicate that the disease was beyond the resources of art."

There are, however, other complications of pertussis which we meet with in practice, though we are not called upon to treat them so often as those which I have just mentioned. Thus, there is a species of catarrhal diarrhœa, arising from the remarkable susceptibility of the mucous membranes in early life, which will often give you trouble, because it reduces the strength of your patient, and interferes considerably with some of the medication which you would otherwise adopt. An irritable state of the stomach you will find a source of no small annoyance, particularly when the child is incapable of retaining even the blandest fluid. It may accompany diarrhœa; or else the repeated vomiting has associated with it a constipated condition of the bowels, a red tongue, and numerous small aphthous ulcers about the lips and cheeks. When acute inflammations of any part of the alimentary canal supervene, they may be considered as not attributable to the hooping-cough: they exist at an advanced period of the disorder—in fact a few days before death—coincide with other complications, and their nature and symptoms are precisely the same as when they arise idiopathically.

In almost all instances in which the paroxysms of coughing are violent, long continued, and give rise to more or less nervous congestion, we shall find serous infusion into the cellular tissue of the eyelids, about the face, and in the hands; sometimes this disposition expands into true anasarca, and has produced death not only by the general progress of the dropsy, but also by hydrothorax. Four cases of this result of pertussis have been reported, in one of which there was hypertrophy of the liver. It is more common to find tubercles in the lungs and bronchial glands, and, indeed, we may take it as a general rule, that hooping-cough has a special proclivity towards tuberculosis; and tubercles may also be deposited in the cerebral meninges, giving rise to acute hydrocephalus.

Original Communications.

SCURVY IN THE NAVY.

By R. S. FARQUHARSON, M.D.,

PASSED ASSIST. SURGEON, U.S.N.

I would respectfully call the attention of the Bureau of Medicine and Surgery to the following remarks in regard to the want of some antiscorbutic article in the ration of our navy. This need is inferred from the existence of a "scorbutic taint," which, besides manifesting itself in a few rare cases in the form of decided scurvy, would seem to be the most probable cause of the general debility and anomalous affections of men, otherwise in the best possible circumstances for the enjoyment of good health.

Dr. Budd has given it as his opinion, that something short of scurvy, "that a condition, that might be correctly designated a scorbutic taint, must often occur in the lower classes in towns, but especially in prisons and asylums, towards and at the close of long winters, where succulent vegetables are scarce and expensive."

That such a condition existed on board this vessel during the months of February and March, while cruising on the south coast of Africa, was inferred from the following circumstances:—

I.—An extraordinary susceptibility to the constitutional influence of mercury, when used in its common forms and given in the ordinary doses. One patient was severely salivated by five grains of calomel, given at the onset of an acute abdominal affection, though it purged; another with secondary syphilis had his gums smartly touched by less than a grain of corrosive sublimate, a preparation which enjoys the reputation of being much less liable to salivate than the others; two more persons were ptyalized each by a dose of six grains of blue mass, given to one in the beginning of an attack of dysentery, and to the other in the course of an obstinate constipation. From that period mercury was rarely given, being deterred from its use in cases where it seemed of prime necessity, not only by this sad experience, but by the condition of the gums (spongy, tender, and inclined to bleed upon the slightest touch), and a confident belief in the existence of a general cachexia, like scurvy, in being the result of a deficiency of some elements of the vital fluids essentially necessary to their normal composition. We are aware that this unusual susceptibility of sailors to mercury has been, by good authority, ascribed to a redundancy of the chlorides in the circulating fluids, rather than to the want of any component part. But this view seems erroneous from the following considerations:—First, this excess is an assumed fact, not having been shown by any analysis; secondly, this liability to salivation shows itself only now and then, whereas it should be constant among men fed on salt provisions for a certain length of time; thirdly, the known fact that no people are more healthy than those engaged in the mining or manufacture of common salt, or in any manipulations with it; fourthly, that the chloride of sodium, when used in quantities much exceeding the demand for it as a condiment, is a most powerful restorer of the red particles of blood in cases where these are deficient (being surpassed in this respect only by the martial preparations), and in healthy persons, when so used, produces a dangerous degree of plethora or redundancy of the red globules; lastly, that the susceptibility to salivation from ordinary doses of mercury showed itself on board the Steamer Princeton, while in the Mediterranean, during the months of July and August, 1848, and being followed by an undoubted case of scurvy, was made the subject of a communication to the Bureau during the winter of 1850–51.

II.—The large size of the daily sick-list for the quarter ending April 1st, 1853, being 6·62 as an average, and 11·5 for the next quarter. This fact, when divested of one weak point (viz. the presence on board of some men of broken-down constitutions, and others even with organic and incurable diseases, the effect of some radical error in the present mode of shipping men), becomes a strong and striking one, when it is considered that nothing like an epidemic disease has prevailed on board; that the brig was then cruising on the south coast, remarkable for its fine climate, its almost uninterrupted good weather throughout the year; that no perceptible local cause of disease exists on board ship; and lastly, that upon four of H.B.M. brigs they have almost perfect good health, though they are confined for many months together to a very small extent of coast, and their men are much more exposed to the causes of disease than ours, from the greater frequency of their boat expeditions.

III. The general state of the gums among the men, soft, tender, bleeding upon any touch whatever (even such as eat the ordinary food), and retracted from the teeth, which, in many cases, would be slightly loose in their sockets. Here it may be remarked, in regard to my own person, that, having half a molar tooth extracted, the hæmorrhage was greater than I had ever seen before, and the stopping proved very troublesome and tedious.

IV. The occurrence of two cases having many symptoms analogous to those of scurvy. As some of these cases may be deemed necessary to the proper appreciation of the inference of a "scorbutic taint," the following notes, taken from the journal, are added:

At sea, March 12, 1853, admitted Willard Snow, Quartermaster, aged 50, with following symptoms: pain in the back and in the head, slight tenderness of the hams and knees, pain also in the soles of the feet, constipation, furred tongue, no appetite; took yesterday afternoon 12 grs. of the compound extract of colocynth, which has not yet acted. ℞. Antimon. et potas. tart., gr. i.; mag. sulph. ℥i.; aq. Oj.; S. ¼ at a dose, to be repeated q. h. 2 until a purgative effect is freely produced. 13th.—Bowels freely moved; tongue clean; appetite returned; pain remains in the knees; ordered friction with a stimulating liniment. 14th.—General health good; pain now in the calves of both legs; heels very tender; no crooking nor any redness perceptible; continue friction. 15th.—Pain about the hams increased, extends also to the calves and to the extensor tendons in the joint of the ankle, these being raised up, and patient complains of a feeling of constant tension in them; heels and soles of the feet very tender and painful; pain of a burning kind, like that of chilblains, referred by the patient to the soft parts and to the surface; says also the pains are like those of scurvy, from which disease he was a sufferer on board the Raritan in 1846; continue friction; f. ℥ ij. lime-juice four times a day. 16th.—Last night both feet swelled and œdematous; pain increased at night; continue treatment. 17th.—General health the same; skin natural; pulse rather feeble; tongue clean; appetite and digestion good; bowels regular; pains very severe last night, at which time both legs and feet were œdematous; pain in the hams referred to the tendons of the hamstring muscles, increased by forced extension of the limbs, they being kept in a partially flexed position as the easiest one; both heels acutely tender to the touch; a slight swelling extending down the inner side into the hollow of the foot; no heat or redness about these painful spots; two or three spots of a dusky red color on the back of the foot; one also at the back of the first joint of each great toe. Continue lime-juice and ℞. spts. ether. nitric. gtt. xxv. q. h. 6. 18th—Rested better last night; no swelling of the calves now; tenderness of one heel gone, patient being able to put it to the deck and bear his weight upon it; right heel remains tender; dusky redness of the spots on the feet has almost entirely disappeared; no effect on the kidneys being perceptible from the spts. ether. nitric., stop it, and continue the lime-juice. 19th.—Worse; increased pain in the hams, legs, and feet; left heel swelled, and as hard as a stone; no heat, no redness, no throbbing; continue lime-juice. 20th.—Better; can bear his weight upon left foot without much pain; left heel much softer; pain remains in the tendons of the ham; general health good; according to patient his feet and legs perspired last night for the first time since his illness; continue lime-juice. 21st.—Better; no swelling about feet or legs; some tenderness lingers about one heel; continue treatment. 22d.—Discharged to duty, some tenderness of one heel remaining, which continued for several days longer, but gradually disappeared, the patient continuing the lime-juice. Though not mentioned in the above notes, it may be here added that several times the gums of this patient were examined and found to be in nowise altered from a normal condition, neither presenting the deep redness of scurvy nor being spongy or retracted from the teeth.

Case II.—St. Philip de Benguela, March 14, 1853. Admitted Charles Anderson, an ordinary seaman. Patient has a pale, anæmic appearance, a dull, stupid countenance, and a very heavy, sluggish manner; was on the sick-list, soon after leaving the United States, with a chancre, of which he was cured and discharged in thirty-two days; has always presented the same appearance since the time of his discharge. Was called to the patient yesterday afternoon, and found him in the following condition, viz.:—Skin cool and moist; pulse very small and thready; hands and feet cold, and of a shrunken, bluish appearance; features sharp and contracted; dark spots under the eyes; lips and finger nails livid; respiration sighing; tongue clean, small, and pointed; slight diarrhœa of three days' standing; no shake or tremor, though otherwise the appearance of one in the cold stage of an ague, or the collapse of cholera, is presented; pain of a boring or splitting kind at the top of the head, with severe aching in the calves of his legs. Gave him two grains of quinine and ten grains of Dover's powder and upon wrapping him up in blankets the heat of the surface returned, and the patient fell into a profound sleep which lasted through the afternoon and night. 14th.—Awoke feeling quite stiff; severe pain in the calves, with the muscles of a boardlike hardness; great tension of all the tendons inserted into the feet; the exterior tendons of the toes standing up like wires as they pass under the annular ligament and along the back of the foot; great pain and tenderness in the soles of the feet, so much, indeed, that it is with great difficulty that the patient stands up. ℞. Sulph. of quinine, ʒ ss; sherry wine, Oj.; S. a wineglassful three or four times a day; ten grains of Dover's powder at night; rub legs and feet with a liniment of ammonia and turpentine. 15th.—Very weak; has a very stupid look this morning; perspires freely; pain and hardness continue about the hams and calves; tension of the tendons about the ankle as before; tenderness of the soles of the same; gums sound and healthy; tongue clean; appetite good, though inclined to be capricious; bowels regular. Continue quinine wine, liniment, and give two pts. of lime-juice four times a day. 16th.—Same state; cannot stand, owing to the excessive tenderness of the muscles of his feet; pain across the fronts of both ankles, where there is a swelling, apparently produced by an effusion under the periosteum, as the tendons can be distinctly felt as they pass over the tumor and under the annular ligament; no swelling or redness about any of the joints; slight stiffness of the back; tongue clean and pointed; appetite good; no headache; bowels regular. Stop quinine, wine, and continue lime-juice; Dover's powders at night, and the liniment. 5 o'clock P.M.—Called to patient on account of a dusky redness over the upper part of the feet; no heat of surface anywhere; some pains in the arms, darting down to the fingers. 19th.—Just after turning out this morning the patient vomited, throwing up a small quantity of clear, glairy matter; no appetite; has the same pale, sallow countenance, with dark spots under the eyes; these have a heavy, dull appearance, and fill with tears, without any cause, when he is talking; tongue clean and moist; has lost its pointed appearance, being now flattened, and slightly indented at the edges by the teeth; gums pale and firm; mucous membrane of the fauces and of the palatine arches of a deep red color; no headache; complains very much of want of sleep; sweats profusely all the time; pulse so small as to be hardly perceptible; feels like a fine, tense thread, seems to have some hardness, an illusion produced no doubt by the extreme smallness of the artery; skin cool; pains in the shoulders and arms, with a feeling of numbness extending down into the hands; pain in hams, calves, ankles, and soles of the feet; the upper parts of the feet and of the fronts of the ankles have a dusky red color, as if exposed to cold and damp weather; an old scar upon the feet is quite livid; the extensor tendons remain in the same state of extreme tension; one calf, the seat of great pain, is swelled and hard, as if a fibrinous effusion had taken place among the muscles; pain much increased at night. Cont. lime-juice; instead of the Dover's powder, give half a grain of morphine at night, and ℞. Quin. sulph. ℈j.; pul. op. gr. iij.; M. ft. pil. No. x. S. one pill q. h. 6. 18th.—General condition the same; slight redness over the tumors in front of the ankles; has a disposition to vomit, with little or no nausea; no appetite; pulse small, rapid, and with the feeling of hardness above described. Patient inclined to hysteria; eyes fill with tears without apparent cause; complains of a sensation of fulness or choking at the bottom of the neck, and also of a feeling of great weight or oppression about the sternum; says, he "*takes so long to breathe*;" indeed he does, for his respiration is slow and sighing; chest everywhere resonant upon percussion; indeed, the resonance is increased; respiratory murmur feeble, with an occasional dry râle or chirping. Cont. treatment, and give three or four wineglasses of brandy toddy per diem. 19th.—Same state as far as general condition goes; the oppression about the chest and throat, greater before breakfast, disappearing very much after that meal; rested better last night; the dusky redness has gone from every part, with the exception of the old scar; extensor tendons yet contracted; not so much hardness of the calf. Stop quinine and opium; cont. lime-juice and toddy, and ℞. Mist. ferr. comp., f. ℥ ss., q. h. 6. 20th.—Feels better; appetite improved; some brightening up of the countenance; slept well last night; pain remains in the extensor tendons, which are yet in a contracted state; tenderness of the soles so much diminished as to allow the patient to walk about with comfort, which has not been so before today; less hardness of the calves; dark red color has returned again about the feet, more marked over the prominences, as the joints of the toes, the heels, extensor tendons, and over the tumors on the tarsus; these have diminished in size. Continue the treatment. 21st.—General condition improved; patient more lively and animated in manner and countenance; pulse improved in strength and fulness; pain, however, was so great last night as to prevent sleep altogether; supply of lime-juice exhausted; continue iron mixture and toddy, and give half a grain of morphine at night. 22d.—Improving, less pain, looks brighter, is stronger; continue treatment. 23d.—Improving; however, the pains are more troublesome, though the hardness of the calves is rapidly disappearing, as also the tumors upon the tarsus; continue treatment. 24th.—Vessel now in port. Patient stronger, but even now indisposed to any exertion whatever; general health appears perfectly good; pain remains in the hams, and about the tendons of the ankles; redness comes and goes. Continue compound iron mixture and morphine; give f. ℥ ij. lime-juice four times a day, and oranges *ad libitum*. 25th and 26th.—No great change; patient gradually improving; continue treatment. 27th.—Slight pain in the various parts as before; when lying upon the left side a sharp pain shoots down the course of the ulnar nerve, going as far as the tip of the ring finger; patient improved in complexion, and has lost, in a great measure, that extreme dulness of expression which was so marked at the commencement of the attack; continue treatment. 28th.—Feels worse; says he came from the open deck a few minutes since, feeling perfectly well; has now (nine A.M.) a decided chill, skin cold and rough, pulse small and thready, face blue, features sharp and pinched, eyes filled with tears, no pain in the feet or ankles, some in the hams, little or no swelling about these parts now; complains bitterly of the lime-juice and oranges; says they are killing him; stop the lime-juice and oranges; give once a day a full dose of the compound iron mixture, and ℞. Quin. sulph. ℈i.; pulv. opii, grs. x.; M. ft. pil. No. x. S. one pill q. h. 6. 29th.—Feels much better; some pain about the hams yet; hardness of calves and tumor of the tarsus gone; hysteric symptoms not so prominent, but perceptible; anxious to return to duty; discharged him from the list, continuing the quinine and opium for several days; from which time nothing more in the way of complaint has been heard from the patient.

Were these cases of scurvy? It would not be well to imitate the older writers, who ascribed every anomalous affection to scorbutus, but yet the inference may be a fair one, that there was here a "scorbutic taint" at the bottom of these cases, producing the symptoms in the first, and modifying and being mixed up with those of anæmia in the second. Now this "taint" which exists with us has been banished from the British navy for more than half a century, by what means a comparison of the respective rations of the two services will show.

The sea-ration of our navy is composed of from 30 to 40 oz. of solid nutriment per day; that of the British navy from 31 to 35¼ oz. daily. (*Carpenter's Hum. Phys. Am. ed.*, 1841, p. 342).

(*To be Continued.*)

RESULT OF A SERIES OF EXPERIMENTS WITH

THE HYPOPHOSPHITES IN PHTHISIS.

By FREDERIC D. LENTE, M.D.,

SURGEON TO THE WEST POINT FOUNDRY, N. Y.

In the columns of the *London Lancet* the discussion of the merits of the hypophosphites is again renewed. Dr. Cotton, of the Brompton Hospital, again details the results of a series of experiments, and again records his verdict against their efficacy in phthisis. The same may be said of the experiments of Dr. Quain, of the Brompton Hospital, and other English physicians who have experimented with this remedy. Dr. Churchill complains in the *Lancet* that the experiments were not properly conducted, although admitting that the specimen of the drug used was genuine, since it was furnished by his own chemist in Paris, M. Swann. His complaint concerning other experimenters has been that the remedy was impure, it being difficult of preparation, and very liable to decomposition after manufacture. I believe that no detailed report of a trial of the remedy has appeared in this country, although the much-vaunted "specific" has been largely used by the public for several years. I have thought that your readers might perhaps be interested in learning the results of a somewhat extended trial of the remedy by myself, and I have for some time intended to give them publicity; and have now had my attention directed to the subject again by the discussion in the *Lancet* above alluded to. Dr. Churchill's allegations concerning the hypophosphites of lime, soda, etc., were so startling that, upon the first report of his experiments, and before the remedy was obtainable in this country, I determined to give it a trial. I accordingly procured the manufacture of the hypophosphite of lime by E. N. Kent, of New York, and subsequently by Mr. Chilton. I tried these on a variety of cases of phthisis in different stages, mostly in the earlier. In the same cases, or in many of them, I tried other remedies, as iron, cod-liver oil, glycerine, etc., not in conjunction with it, but before and after. I will not lengthen this article by giving my notes of these cases, as they would present a great similarity, and be unnecessary. The effect of the salt was negative; it was given in doses of five grains three times a day. Subsequently I tried the solution of the hypophosphites, which is sold all over the country. The result was the same. Desiring to test the matter thoroughly, and being somewhat favorably impressed with Dr. Churchill's theory of the action of phosphorus in a state of feeble chemical combination on the economy, I requested my friend, Dr. Edward R. Squibb, to manufacture a pure article for my experiments. Although having no faith in the remedy himself, he was kind enough to furnish it gratuitously, and to take especial pains to have it perfectly pure; it was put up in half-ounce glass-stoppered bottles, well secured, and, for fear of decomposition, the crystals were not allowed to dry, but were bottled in a slightly moist state. He only exacted a promise that I should give the result of the experiments. As Dr. Churchill cautions particularly against an over-dose, which, he says, may produce various congestions, and even hæmorrhages from the mucous membranes, as of the nose, lungs, bowels, etc., I generally used only three grains of the salt three times a day in milk, at meals. In many cases finding, after repeated trials, no perceptible unpleasant effects, I increased the dose to five grains. But in only one instance did I ever know a patient to complain of any unpleasant consequence: this was a burning in the pit of the stomach, and nausea; and the remedy was obliged to be given up. In a great majority of the cases no effect was produced by the remedy; in some a moderate improvement seemed to follow its use; but in most of the cases other remedies had produced better effects, or did produce better after being substituted for this. In a very few cases it seemed really to be efficacious where other remedies had failed. But in no instance did I observe those marked, prompt, and positive effects, ascribed to it by its inventor, Dr. Churchill. I should have mentioned that the salt manufactured by Dr. Squibb for me was the hypophosphite of potassa.

Cold Spring, July 11, 1863.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, Feb. 11, 1863.

DR. D. S. CONANT, PRESIDENT, IN THE CHAIR.

REMARKABLE DISPLACEMENT OF DECIDUOUS MOLAR TOOTH.

Dr. Post presented an anterior deciduous molar tooth removed from the jaw of a little girl six years of age. The tooth had grown horizontally across the alveolar process, the crown looking towards the tongue, while a portion of a fang was buried in a groove in the cheek. This remarkable displacement was probably due to the fact that the permanent tooth had encroached upon the tooth in question.

Dr. Conant remarked that he had in his possession a skull in which a wisdom tooth had been growing almost directly outwards.

FIBRINOUS DEGENERATION OF EYE—EXTIRPATION OF EYE.

Dr. Noyes presented, first, an extirpated eye, which illustrated fibrinous degeneration as the result of chronic inflammation. It was removed from a young man twenty-one years of age, who, while upon a sidewalk, was struck upon the ball of the eye by a slate which fell from the roof of a house. As a consequence inflammation of the eye took place, and becoming chronic, the deep structures became seriously involved, resulting in very extensive fibrinous degeneration.

OSSEOUS CHOROID.

The second specimen was an instance of osseous choroid, the result also of inflammation following a wound of the eye. Shortly after the receipt of the injury, the inflammation went through its usual course, terminating in collapse of the eyeball. The patient suffered no inconvenience for many years after, when finally the organ became tender and congested, and soon the vision of the other eye was interfered with. Dr. Noyes remarked that it was almost certain to find osseous degeneration of the choroid followed by sympathetic trouble of the opposite eye; indeed this had been the most prolific source of the sympathetic irritation referred to.

OPACITY OF CORNEA FROM CALCAREOUS DEPOSIT.

The third specimen consisted of an opacity removed from the cornea of a child that afternoon. The general appearances of the said opacity were such as to give rise to the suspicion that it had been occasioned by the deposit of some of the salts of lime, as the direct results of an inflammation which had previously existed.

In answer to a question from Dr. Conant, Dr. Noyes stated that the osseous deposits in the eye presented under the microscope all the essential anatomical elements of bone tissue.

MALIGNANT DISEASE OF LEG—AMPUTATION.

Dr. James R. Wood presented a specimen of osteo-sarcoma, and remarked upon it as follows:—About six weeks since I was requested to see a young gentleman, eighteen years of age, with an enlargement over the anterior and lateral aspect of the leg. During last September he fell upon a wagon at the country-seat of his father, and bruised his skin. Shortly after he suffered from severe pain, which continued to increase without much swelling for a month or six weeks. At this time a considerable swelling occurred over the anterior aspect of the leg, about three inches below the knee. This continued to increase, when he came to town to consult several eminent surgeons. When I saw him I found a swelling about the middle of the lower third about the size of half a sixpenny loaf of bread, extending to within an inch of the knee-joint. It was so soft at its most prominent portion that two of our most eminent surgeons were disposed to think that fluid existed at that point. I found on careful examination that the tumor presented what to me was quite characteristic of malignant disease, viz. a peculiar thrill communicated to the touch. By pressure upon the artery above the disease, the tumor could be made to decrease in size, and when the pressure was removed, it would resume its former dimensions. It went on growing rapidly, and on Monday last I amputated the thigh about its middle third, assisted by Dr. Buck, who saw the case for the first time in consultation with me that day. The specimen, as here seen, presents the usual appearance of osteo cephaloma, or as it is sometimes styled, osteo-sarcoma, or fungous hæmatoides. That portion of the tumor which gave the deceptive sensation of fluctuation was found composed of a very soft material resembling brain-substance.

An interesting question comes up in this connexion in reference to amputation. I know that a good many surgeons in New York have been opposed to the performance of the operation, and I know that a number who opposed the amputation years ago have been converted to a different opinion, and now practise it. The same disease occurs in the antrum maxillare, and it is well known that where the diseased portion has been removed, it has reappeared upon the opposite side. I suppose that most of us who have performed this operation have had success of this kind. But I know that occasionally the same disease occurring in the extremity is arrested in its development.

I presented the last specimen of this disease to the Society about three years ago. The patient was a middle-aged man, whose limb I amputated at his house in Kingston, Ulster Co. A little more than a year after the amputation his physician, Dr. Von Hoveuburgh, informed me that the patient had died of pure pneumonia, there not being a single vestige of cancerous disease found. I have two patients alive, one whose limb I amputated some ten or twelve years ago for this disease. That specimen was presented to the Society, and a microscopical examination of the tumor made by Dr. Clark, who pronounced it cancer. The leg of the other patient I amputated since. Dr. Buck has a young lady coming to his office whose leg was amputated some months since, and who is perfectly well. Dr. Mott, one of the surgeons who saw this case, gives the same experience.

I saw in consultation with Drs. Forrester, Mott, and Parker, a case of a young lady who had the disease situated above the knee. Amputation was resorted to, but the disease returned, extended to the groin, and the patient died a most horrible death from exhaustion.

When this disease occurs in the course of a limb, in my opinion it is not only good practice but it is humane to remove it by amputation. It is remarkable that under these circumstances the patients almost always do well for a time, the stump heals kindly, and if the disease returns the sufferer is made easy at least a year. Then, again, if it does return it hardly ever attacks the stump, but its most frequent seat of recurrence is in the groin, or the ganglia just above Poupart's ligament.

Dr. Post agreed perfectly with Dr. Wood as to the relief afforded to patients suffering from this disease by amputation. Even if the disease did recur it was less apt to occasion as much suffering as if it were in its original seat.

REMARKABLE ARREST OF CANCEROUS DISEASE BY OPERATION.

Dr. Conant referred to a remarkable case of arrest of cancerous disease by operation which had occurred twenty years ago in the practice of Dr. Mussey. The disease first made its appearance in the thumb, and that member was amputated; recurring in the stump the hand was amputated; and continuing to return, the forearm, arm, and shoulder were successively removed; and last of all it was found necessary by Dr. Crosby, who then had charge of the case, to remove the scapula and clavicle. The disease never returned after this last operation, and the subject of this series of operations is now perfectly well. Dr. C. also referred to a case of this disease occurring in the lower end of the femur, where amputation was advised. The patient was a female, thirty years of age, and refused to have the operation performed. The result was that in time the entire foot sloughed off, together with nearly all the flesh of the leg, and the patient finally died in the greatest agony, worn out by loss of blood and bed-sores.

Dr. Wood was very much opposed to exploring tumors which were supposed to be malignant, unless it was with a view to have amputation of the limb performed immediately afterwards. Otherwise the tissues of the tumor were apt to break down, and hasten the death of the patient.

DISTORTION OF LOWER EXTREMITIES FROM HYPEROSTOSIS.

Dr. Post was of the same opinion.

Dr. Finnell presented the lower extremities of a man, twenty-seven years of age, which were the seat of very extensive hyperostosis. The deformity occasioned thereby was most extraordinary and frightful: the two tibiæ were very considerably bowed from before backwards, the knee-joints were increased by irregular and ragged bony prominences to nearly three times their natural size, while the small bones of the foot were distorted by the abnormal growth to such an extent and degree as to be almost unrecognisable. The right leg was more affected than the left, and in the cavity of that knee-joint were found several pieces of detached bone. With all this distortion the patient was able to get up and down stairs without much difficulty, and follow his vocation, that of a cigar-maker, until within two days of his death. There were no abrasions of the skin over the prominent points. He was an illegitimate child, and an attempt had been made to prevent his birth. The father and mother were healthy. The disease was confined wholly to the lower extremities. Death was occasioned by intemperance.

The Society then adjourned.

FOREIGN CORRESPONDENCE.

LETTER XLI.

By PROF. CHARLES A. LEE.

ROME.

Nov. 27, 1862.

I next turned my steps towards the Hospital of St. James, *San Giacomo*, as it is called by the Romans. This is one of the most beautiful of the Roman hospitals, though not as large as some of the others. It dates as far back as 1339, and was founded by the executors of Cardinal Colonna, in compliance with his testamentary request. During the present century it has been much enlarged and improved by Pius VII. and Leo XII. It was founded originally for the treatment of ulcers and other loathsome diseases, but in 1515 Leo X. set it apart especially for the reception of leprosy and syphilitic affections. In 1855 the whole building was restored, or rather re-erected, by the present Pope, Pius IX., and opened for the reception chiefly of syphilitic diseases in persons of both sexes, in August, 1856. The main ward is one of the noblest halls in Rome, being 340 feet in length, and of corresponding height and width; giving ample room for two rows of beds on each side of the centre, along which runs throughout its whole length a pavement of pure white marble, six feet in width, and of the finest quality. The windows are placed high above the floor, thirty feet or more, and access to them is furnished by a light gallery on each side. The register showed the present number of patients to be 265, 110 males and 155 females. The female ward is not so elegant or so well fitted up as that of the males, the ceiling being lower. In both two rows of beds extended on each side of the centre throughout their whole length. Many of the females were sitting up and busily engaged in knitting, sewing, etc. The institution is managed by a government commission, appointed by the Pope, and is attended by four principal physicians, aided by several assistants, one or more of whom must be in the house all the while. One ward was principally occupied by sick children; there being no hospital in Rome especially appropriated for children, they are scattered about through all the hospitals, an arrangement liable to many serious objections. The male nurses were *Brothers of the Religious Order of St. John of God* (aided sometimes by other orders), a confraternity devoted to the care and nursing of the sick. The female department was in charge of the *Sisters of Mercy*, an order devoted to the same pious vocation. There was a small clinical ward set apart for cases illustrating the lectures which are given here from time to time by professors of the University, and a similar arrangement exists in the other large Roman hospitals. All the patients are visited three times daily, morning, noon, and evening, and the utmost care bestowed on every case. The institution is designated as the Hospital of Incurables, but although formerly it may have deserved such an appellation, it does so no longer, as the former rules of admission have been greatly relaxed, and large numbers of cases are annually discharged. There is a good lecture-room and a very respectable library connected with the hospital. Patients are admitted here, as in all the Roman hospitals, irrespective of age, country, or religion, and all receive equal care and attention. This hospital was a favorite resort of the celebrated St. Philip Neri, and it is constantly visited by ladies belonging to the wealthiest and noblest families of Rome, for the purpose of using their gentle but powerful influence in consoling and reclaiming the unfortunate females whose vicious lives have driven them to seek refuge and treatment within its walls. It speaks well for the kindness and benevolence of the Pope that he occasionally makes unexpected visits to the hospitals and other public institutions of Rome, and examines personally into all the details of their management. This insures perpetual vigilance and untiring devotion to duty.

I next visited *San Giovanni di Calabita*, situated on the island of St. Bartholomew in the Tiber, and occupying the very spot where once stood the pagan temple of Esculapius, or a hospital attached to it. It sometimes is called *dei Benfratelli*, or *Fate bene, fratelli* ("Do good, brethren"), derived from the inscription on the begging-box of the friars of the order of the Spanish *San Juan de Dios de Calabita*, by whom it was founded in 1538, during the pontificate of Gregory XIII. It is under the care of the Brothers of St. John of God, an order especially instituted by its holy founder for attendance on the sick. It is devoted solely to male patients affected with acute diseases. The principal hall or ward is 200 feet in length, 40 feet in width, and of equal height, containing ninety-four beds, a majority of them occupied. The mortality is on an average about 8 per cent. Like most, if not all the Roman hospitals, it has a small but elegant chapel rising in the centre of the corridors, thus giving an opportunity to all the patients of witnessing and participating in the religious services. As to the particular treatment of the acute affections which are here received, I could gain no very definite information; I however ascertained that bleeding and leeching were often resorted to in connexion with the other well known antiphlogistic measures. I was pleased also, to observe in this hospital a ward set apart especially for strangers and the clergy who may happen to fall sick in Rome. There is a pleasant promenade in the rear of the main building, overlooking the Tiber, where convalescent patients take their daily walks. The hospital is entirely supported by voluntary contributions, each contributor or benefactor having the privilege of sending patients, the number being proportionate to the amount of his subscription. The apothecary department was in a large, splendid room, with marble floors, frescoed ceiling, and adorned with statues and paintings, marble counters, cases with glass doors, etc., etc. In the centre of the room stood a beautifully polished granite column, surmounted by an elegant statue of the Virgin Mary.

The next hospital I visited was *San Gallicano*, in the Trastavere, for cutaneous diseases in persons of both sexes. It was founded in 1722 by Emilio Lami, a priest, as a hospital for leprosy, a disease now rarely met with in any part of Italy. It was enlarged in 1754 by Benedict XIV., but many of its improvements are owing to the pious care of the present Pope. There is ample accommodation for 250 to 300 patients, of both sexes, adults and children, but at the time of my visit the register showed but 160. There were two rows of beds on each side of the wards, and canopies, as usual, for curtains. A majority of the children were afflicted with tinea and psora in some of their forms. The service is rendered by three physicians. There is a beautifully fitted-up chapel for each sex. The average duration of treatment for cases of tinea is about one year, many being a year and a half under treatment. But their time is not wasted. The boys are placed under the care of the Mothers of St. John of God, by whom they are taught reading, writing, and arithmetic, and are thoroughly grounded in catechism and Christian doctrine, thus undergoing a course of education and a course of physic at the same time. The girls not only receive literary and religious instruction, but are also taught needlework and various useful occupations. They are under the special charge of the Sisters of Charity, who spare no pains to indoctrinate them in the principles of religion, to impart useful information, etc. Separate bath-rooms are provided for both sexes. In short, the whole establishment seems complete in all its departments, clean, and well ventilated, and reflects the highest credit on its managers. The *Santissima Trinita di Pellegrini* is the great convalescent hospital of Rome, containing full five hundred beds, and affording relief to more than 11,000 patients annually. It was founded by St. Philip Neri in 1550, and was destined for the reception of pilgrims on their visit to Rome during Jubilee and Holy Week, as well as on other occasions. Boniface VIII. instituted the Jubilee in the year 1300, and this has been the great source of pilgrimage to Rome, from that time to the present. It was intended at first to have it take place every hundred years, but the time was shortened by Clement VI., whose seat of government was at Avignon, who ordained it in the year 1350; and it was further shortened to a quarter of a century by Paul II. in 1475. To succor and relieve these pilgrims, St. Philip Neri founded the confraternity of the Holy Trinity in 1550, and, in the absence of such, for the reception of convalescent patients from other hospitals. "Paul IV. granted the confraternity a convenient building for a hospital, and Clement XII. added refectories, in which about 1000 persons can receive their meals at the same time. In Jubilee years the number of pilgrims is immense, and even in ordinary years, especially at Easter, it is considerable. To be received they must have come from a distance of at least sixty miles, and have brought with them certificates from their bishop and parish priest, that the object of their journey was to visit the holy places. Italians are entertained for one day, Ultramontanes two, Portuguese five, and so on. In the Jubilee of 1825 the number of pilgrims who received hospitality was 263,592; and the expenses of that under this head amounted to 64,644 dollars." In ordinary years, however, only about 4,000 of these travellers are lodged in this hospital. There has been a gradual falling off during Jubilee years, for we read that in 1625 as many as 582,169 were entertained in this hospital, and in 1728, 382,140.

The wards in this establishment are of immense size, I should judge over three hundred feet in length, and corresponding proportions. Two are appropriated solely as eating-saloons for pilgrims, of whom there are several hundred every day, at meals; they are also furnished with comfortable lodging in the dormitories. There is a large church or chapel connected with the hospital. There are two large rooms connected with this hospital set apart for the bathing of the feet of the poor pilgrims on the Wednesday, Thursday, and Friday of Holy Week. The rooms are about forty by twenty-five feet, with a seat running around the walls, and beneath are niches each holding a wooden foot-tub of five or six gallons' capacity, in which the Roman nobility, and several of the cardinals and other high church dignitaries, perform the office of washing feet. The tubs are all numbered, and I noticed that there were seventy-two in each room. Ladies of the highest rank, including the Queen of Naples and other princesses, perform the same office for the poor women. As a religious custom I have no objection to it—indeed, it has many beautiful features about it, and scripture can be quoted in its favor; but a hygienist might wish that the ablutions could be extended to the whole body. The next hospital, in the order of visitation, was *La Consolazione*, situated near the Tarpeian Rock, now reduced by accumulations of rubbish to about thirty feet in height. It stands at the base of the Capitoline Hill, and was founded and enlarged by Cæsar Borgia. Its main hall is about two hundred feet long, and contained ninety beds, of which forty only were occupied. The present Pope has added a new wing to this, containing about twenty beds. The width of the halls, forty feet, and the great height of the ceiling, allow of two beds to be placed at each side, as at San Spirito, should occasion require. It is appropriated to patients of both sexes for surgical diseases, especially accidents, as wounds, burns, fractures, etc. Being situated near the populous quarters of the Monti and Trastavere, most of the cases of stabbing are taken to it, and it is never free of cases of this kind. I witnessed a post-mortem examination here of a poor fellow who had been stabbed in the thigh, wounding both femoral artery and vein, and although the artery had been tied, he died of venous hæmorrhage twenty-one days after the accident. The wards were perfectly clean, and admirably ventilated by the large windows above and openings in the walls below near the floor. The beds, which were about five feet apart, were good, clean, and comfortable, the bedsteads of iron, and everything bespoke the utmost care and attention. The brick floor, as usual, was the only drawback. Six secular clergymen constantly reside in a house attached to the hospital, which is also attended by Jesuits and other religious orders. A number of novices also give their constant attention to the sick. Here, also, there is a handsome chapel, the altar of which is visible from every side, where mass is daily celebrated for the benefit of the patients. From all I have seen and heard, I can have no doubt that this salutary provision for the comfort and consolation of the patient is of great value in aiding the efforts of the physician and contributing towards a cure, and I cannot withhold my tribute of admiration for a clergy who show such fearlessness, faithfulness, zeal, and devotion, in promoting the spiritual and temporal interests of the afflicted poor—an example worthy of all imitation by the religious, both clerical and lay, of all Protestant denominations. On the opposite side of the street is the hospital for women. There were but thirty or forty patients, but everything betokened the best management. The hall was large, clean, and well aired, and similar arrangements as regards chapel, etc., as in the male department. There is a small museum in this hospital, containing some beautiful wax preparations by Professor Sartori. There are also some handsome dissections showing the nerves of the arm and leg, etc. One or more physicians are always in attendance here, ready to attend any cases that may be brought in.

American Medical Times.

SATURDAY, JULY 25, 1863.

RIOTS AND THEIR PREVENTION.

Among the improvements which the Emperor of France is said to have recently introduced into Paris, is the removal of a large group of thickly clustered but dilapidated and wretched tenement houses, and the conversion of the site into a public square. The work was undertaken ostensibly to beautify that portion of the city. Those familiar with the history of these abodes of poverty, however, remember this locality as the place where have originated many of the most terrible riots with which that city has been visited; and they shrewdly suspect that the real motive of the Emperor was to destroy the nidus of future mobs and revolutionary movements. The example is one worthy of imitation, in a modified sense, on the part of our city, as we shall demonstrate.

During the past week New York has gone through one of those ordeals of anarchy so common in European cities during civil commotions. Within a few hours of the commencement of riotous proceedings the civil authorities were completely ashore, and in the universal agitation of society the very dregs seemed to float to the surface, and surged to and fro along the streets and avenues, uncontrollable elements of destruction. Business was suspended; public conveyances ceased their rounds; places of public amusement were deserted, and a pall of gloom hung over the city as if some terrible judgment was impending. Few citizens were seen abroad, but at every turn were groups of persons seldom if ever before met in the more respectable parts of the town. Their garments were ragged and filthy, and their faces, stamped with every crime, gleamed with the ferocity of unbridled passions. Individual acts of violence occurred on every hand, and this terrible carnival of murder and arson culminated on the first day in a grand ovation to the demon of the mob in the conflagration of an orphan asylum over the heads of several hundreds of helpless, homeless, and fatherless children. No mob can show a blacker record than that which disgraced New York on July 14, 15, and 16, 1863.

The various political and social phases of this great riot will be largely discussed in the daily papers, but there are some things worthy of record as gathered from a professional standpoint. It is a noticeable fact that the rioters represented for the most part the lowest and most abandoned class of the poor. They proceeded from those districts of the city notorious for their filthy and unpoliced streets, and wretched and uninhabitable tenement houses. Here live and grovel in darkness, filth, drunkenness, and disease, a large population, roughly estimated at twenty thousand. The following description of this class, as drawn by Mr. N. P. Willis, an eyewitness to the scenes of arson and murder during the late riot, will be recognised as truthful by every physician whose duties may have led him into these abodes of wretchedness:—

> "The high brick blocks and closely packed houses in this neighborhood seemed to be literally hives of sickness and vice. Curiosity to look on, at the fire raging so near them, brought every inhabitant to the porch or window, or assembled them in ragged and dirty groups on the sidewalk in front. Probably not a creature, who could move, was left in-door at that hour. And it is wonderful to see, and difficult to believe, that so much misery, and disease, and wretchedness, can be huddled together and hidden by high walls, unvisited and unthought of, so near our own abodes. The lewd, but pale and sickly young women, scarce decent in their ragged attire, were impudent, and cattered everywhere in the crowd. But what numbers of these poorer classes are deformed, what numbers are made hideous by self-neglect and infirmity, and what numbers are paralytics, drunkards, imbecile, or idiotic, forlorn in their poverty-stricken abandonment for this world! Alas! human faces look so hideous with hope and vanity all gone! And female forms and features are made so frightful by sin, squalor, and debasement. To walk the streets as we walked them, for those hours of conflagration and riot, was like a fearful witnessing of the day of judgment, with every wicked thing revealed, every sin and sorrow blazingly glared upon, every hidden horror and abomination laid bare, before hell's expectant fire. We have not made the character of 'the mob' a part of our description—it has been done so fully by the daily journals. But we must add our confirmatory remark upon one peculiarity of the confessed rioters. *There were no* DECENT *Irish men among them.* Irish they all were—every soul of them—but they were the dirty, half-drunken, brutal rowdies, who are the leprosy of that fair-skinned race. They were the filthy pustules of an eruption on the Irish skin—not to be accounted part of the natural complexion of the blood, but starved down and purged away like a diseased excess. In ordinary life, such fellows sneak about, and hide from daylight, in places where they can drink, and debauch, and contrive wickedness; but here—where this grand fire made them feel like masters, and gave them impudence for the hour—they were the pictures of saucy beggars, half-drunken brutes and robbers, longing to put a clutch upon your throat, and empty your pockets."

It was also noticeable that while business was generally suspended, every establishment where liquor is sold was open, and crowded with customers. Many of the more central grogshops had been previously supplied with money by the chief conspirators, and were directed to give the crowd unstinted measure whenever it made its demand. This was done, and it is due principally to liquor that the inhuman barbarities were practised upon individuals, and many of the attempts of arson were made. Hundreds of industrious laborers driven from their work, and left to wander about the streets, were thus made fiends of the most malicious and daring kind. Scarcely an overt act of violence was perpetrated that was not directly traceable to intoxication.

It would be lamentable, indeed, if the fearful lesson which this deeply laid conspiracy against the property and lives of our citizens has taught were allowed to pass unimproved. Transparent as is its political significance, its social bearings are not less clear. We learn the source from which must spring every lawless outbreak against order, law, and the peace of society. The elements of popular discord are gathered in those wretchedly constructed tenement houses, where poverty, disease, and crime find a fit abode. Here disease in its most loathsome form propagates itself from parent to child, more and more aggravated with each generation. Deformities of the body, typical of mental and moral aberrations, are seen in every household. Unholy passions rule in the domestic circle. Trained in such a school, children grow destitute of every generous impulse, and habituated to scenes of cruelty and vice. Everything within and without tends to physical and moral degradation. The noisome atmosphere which they breathe, the scanty and depraved food which they eat, combine to dwarf the body and mind, and lead to the most vicious habits. Here, in the tenement houses of our city, we find the seeds of civil discord, of every species of vice and crime, always ready to germinate with the slightest stimulation. Relax the legal restraints which surround the tenants of whole blocks of buildings, and madden them with rum, and they rush forth prepared to commit the most fiendish acts. As long as New York disregards the home life of this class of the poor, she nourishes in her bosom a viper which any day may inflict a fatal wound.

The great and patent prevention for riots like that which we have witnessed is radical reform of the homes of the poor. No family circle can be practically virtuous which grovels in the cellar or the garret, deprived of the sunlight and fresh air; nor can a family be very vicious which enjoys airy and spacious rooms, and is surrounded by the health-giving influences of pure air, sunlight, cleanliness, and thrift. Every family in this city could be thus accommodated, did our authorities care to undertake the work. The old rookeries in crowded and filthy districts should be destroyed, and new and convenient houses built. Tenement houses can be made convenient for families, with sufficient air-space and sunlight, proper rooms for cooking, eating, and sleeping, and still be remunerative. But no landlord will consult the wants of his tenants until compelled to do so by the rigid enforcement of law. To accomplish this necessary and now imperative reform, we must have a clean Board of Health. An enterprise involving such important municipal improvements will never be carried successfully forward by a mere political official. No less important is it that the retail of ardent spirits should be placed under more stringent regulations. At present the largest license is given, or at least taken, and a rising mob finds at every corner the maddening draught awaiting its arrival. Dram-drinking, like prostitution, is one of those terrible social evils which every philanthropist wishes blotted out of existence, but which is still subjected to only a very modified control. This control should be more absolute than at present. In times of popular excitement every grog-shop should be closed, and the sale of liquors made penal.

If the reforms which we have suggested could now be effected, the terrible lesson which New York has learned would not be in vain.

THE WEEK.

The Coroners of New York enjoyed a very fine harvest during the riots. They seem to have gone through their inquests with remarkable despatch. We cannot learn that any investigation has yet been instituted by a coroner in regard to the circumstances attending the deaths of the persons concerned. We trust it is not true, as alleged, that not a Coroner has dared to examine a case or make an autopsy, lest he should incur the displeasure of the mob. Such imbecility in county officers, not less important than the Sheriff, would deserve the severest censure.

Several striking differences are noticeable between soldiers and rioters. The soldier seldom admits that his wound was received in the back, but the rioter always places himself in the position of retreat when describing the manner of receiving his wound. Again, the soldier will seldom part with the missile which is removed from his wound, prizing it as a most honorable evidence of his bravery; the rioter, on the contrary, does not wish to retain this witness to his shame and crime.

One of the most deplorable results of an attempt to suppress mobs by military force is the destruction or maiming of the innocent. Of the three or four score wounded taken to the hospitals several were little boys and girls. The wounds are of the most frightful character, and will leave permanent deformity.

Obituary.

JOHN WATSON, M.D.

Dr. John Watson was born in Londonderry, Ireland, in April, 1807. His parents (of Scotch descent) emigrated to this country in 1810, and in 1818 became residents of this city. Young Watson received a good English education, with some instruction in the Greek and Latin languages, but his circumstances did not permit him to enter college. For two years he was engaged in school-teaching as a means of support. In 1827 he entered the office of Prof. J. M. Smith as a student of medicine, where he was distinguished for his industry and most assiduous devotion to study, taking full notes of all the lectures, with daily attendance upon clinical instruction at the New York Hospital. Before his graduation he served as house surgeon at the hospital, and after passing a most creditable examination the degree of Doctor of Medicine was conferred upon him, in March, 1832. In 1833 he was appointed one of the attending physicians of the New York Dispensary, in Centre street, and retained the office for several years. In the spring of 1835 he spent a few months in Great Britain and on the Continent, in company with an invalid family: thus having afforded him an excellent opportunity of visiting medical schools and hospitals, as well as of forming many valuable acquaintances among the most distinguished of the profession, with many of whom he continued in active correspondence in after life. In 1836 he was, with others, instrumental in forming the New York Medical and Surgical Society. In 1837, in connexion with Drs. Swett, Beales, Bulkley, Adams, and Roberts, he established the "Broome Street Infirmary," and in the following year the same parties, in conjunction with Drs. Post, Buck, Macdonald, and Vandervoort, established the "Broome Street School of Medicine," with courses of lectures in the spring and fall during the college recess. Dr. Watson filled the chair of Surgical Pathology for three years, when the school became merged in the spring course of the College of Physicians and Surgeons. Having been appointed in 1838 one of the surgeons of the New York Hospital, he first introduced regular clinical instruction by courses of lectures, although to Dr. A. H. Stevens is due the honor of having first delivered occasional clinical lectures in this institution. Dr. Watson here was instrumental in establishing many reforms, more especially as regards heating and ventilation, upon which subjects he published a valuable monograph in 1851. He continued twenty-four years in office. In 1839 Drs. Swett and Watson established the *New York Medical and Surgi-*

cal Journal, published quarterly; it was conducted with great ability, and was well patronized, but closed its career after two years' existence, the expenses having, as usual, eaten up the profits. In 1837 Dr. Watson accepted propositions from Dr. Alex. H. Stevens to become his associate in practice, and, upon the retirement of Dr. Stevens in 1849, succeeded to a large and most lucrative business. This was the turning-point of his career, and determined the fortunes of his after life. In 1847 he took an active part in the organization of the American Medical Association, and also of the New York Academy of Medicine, although, for private reasons, he did not become a fellow of the Academy until many years after. He was twice elected Orator, and in 1859 had the honor of being chosen its President. In the spring of 1862 the insidious approaches of his fatal malady, scirrhus of the rectum, first manifested themselves, and he was debarred from the active exercise of professional duties. He was confined to his room and to his couch for more than twelve months previous to his decease, and during this long period of suffering displayed great fortitude and resignation. His death occurred on the morning of the 3d of June. Dr. Watson, though not a learned man in the strictest sense of the term, was yet familiar with the writings of the early Greek and Roman medical authors, and, through translations, with the Arabic. It was his pride and pleasure to collect together without regard to expense the best editions of the early writers on medicine, and he has left behind him in this regard the most valuable private library in this country. He was a voluminous writer, as the medical journals for the last thirty years bear testimony, in monographs and published cases; but the greatest efforts of his pen will appear in his posthumous publications. These are entitled, "The Obscurities of Disease," "Clinical Acumen, or Sources of Misjudgment in the Study of Disease," and "A History of Medicine." Ardent in his attachments, impulsive and irritable in his temperament, but not vindictive, a learned and skilful practitioner, a judicious counsellor, his death has created a blank in the profession not easily filled; while his career presents a remarkable instance of successful industry under early disadvantages, and an example worthy of all imitation. "*Vale, in æternum, vale.*" J. G. A.

Correspondence.

REMARKS ON THE ORDER OF THE SURGEON-GENERAL.

[To the Editor of the American Medical Times.]

Sir:—I was much gratified with the timely and temperate remarks upon Circular No. 6, of Surgeon-General Hammond, contained in the editorial of your issue for the 20th ult.; and the speech of Surgeon Cox, and the letter of the Surgeon-General, which have appeared in the two subsequent numbers, give promise that the spirit which dictated the circular, and the facts on which it rests, will presently come to be understood and appreciated by all candid and discriminating medical men, whether in the army or in civil life.

The affair, as put by the Surgeon-General, is very simple and pointed, viz.: from official reports of Inspectors, Medical and Sanitary, and from modern pathology, he learns that calomel and tartar emetic are very much abused by military surgeons, are not essential to the proper management of diseases incident to soldiers, and that the evil arising from the abuse of drugs in the army outweighs the good that flows from their proper administration.

If honestly convinced of these premises, the Surgeon-General would be guilty of a dereliction of duty and great inhumanity if he had not done just what he did do. Then what is there in his action to make heat and bad blood among medical men? And yet there has been manifested an asperity of feeling and an intemperance of language by some members of the profession rarely, if ever, before witnessed. This intense perturbation is only to be accounted for on the theory that there is in the profession a species of fetichism, whereof calomel is the idol, and the Surgeon-General is cursed as an iconoclast by these disciples with all the bitterness and blindness common to heathen idolators.

Measured by the rule usually applied to the interpretation of public documents, nothing can be found in the circular asserting general ignorance in military surgeons, or in anywise reflecting upon private practitioners. It implies what every one knew before, that there are some ignorant and incompetent surgeons in the army. From the hands of such unwise practitioners the Surgeon-General takes the flaming swords of calomel and tartar emetic: all others know how to treat disease as well without these agents as with them. He has, therefore, by a happy expedient, devised a means of preventing the incompetent from doing mischief with two powerful drugs, and has not thereby taken anything essential from the hands of the competent.

The asserted inconsistency of the Surgeon-General in cutting off the supply of calomel and permitting unobstructed access to the other preparations of mercury, is, in fact, a conclusive evidence that he proceeds upon a just and enlightened understanding. He has no quarrel with mercury: it is an excellent medicine, and he leaves seven different preparations of it in the supply table for the army, obtainable as all other drugs are obtained. Calomel has been abused, has caused great and unnecessary mischief, and he has, therefore, placed it, not entirely out of reach, but in such position that special exertions are required to obtain it. This will serve, not only as a very pointed caution in the use of calomel, but also act as an excellent monitor to the judicious exhibition of all mercurials, and go far towards abolishing the evils arising from the careless administration of them.

Comparatively few physicians now prescribe calomel and tartar emetic to the extent it was done a few years since; and there are some who discard these drugs almost entirely, using the milder and less perturbating medicines of the same classes to accomplish the ends formerly sought to be attained through their agency. Probably no one familiar with the present state of medical science and the resources of our pharmacopœia, regards calomel and tartar emetic as indispensable agents in the treatment of disease; doubtless many look upon them as great conveniences, but that is the highest position that can at present be claimed for them.

Let the profession give this circular, and the effects it will produce, a calm, unprejudiced, and deliberate consideration, and I venture the prediction that it will prove a boon, not only to the army and military surgeons, but also to the people and civil practitioners of medicine.

Yours etc.,
Jas. F. Hibberd, M.D.

Richmond, Ind., July 10, 1863.

Army Medical Intelligence.

ORDERS, CHANGES, &c.

SPECIAL ORDERS, No. 304.

War Department, Adj. Gen'l's Office,
Washington, July 9, 1863.

2. Surgeon W. Clendenin, U.S.V., will report without delay to the Commanding General, Department of the Cumberland, for duty.

5. So much of Special Orders 126, current series, from this Office, as dismisses Surgeon W. D. Stewart, U.S.V., is by direction of the President revoked, and he is hereby reinstated in his former position in the army.

17. Assistant-Surgeon James F. Weeds, U.S.A., is, on account of sickness, hereby relieved from duty in the Department of the Cumberland, and will report in person without delay to the Surgeon-General.

By order of the Secretary of War,
E. D. Townsend,
Asst. Adjutant-General.

SPECIAL ORDERS, No. 300.

War Department, Adj. Gen'l's Office,
Washington, Jnly 7, 1863.

9. Assistant-Surgeon A. W. Tryon, 100th New York Vols., will report in person, without delay, to Surgeon R. O. Abbott, U.S.A., Medical Director, Department of Washington.

14. Leave of absence is hereby granted to the following Officer:

Assistant-Surgeon E. M. Corson, 69th Pennsylvania Vols., for twenty days.

The following assignment of Medical Officers is hereby made:

Assistant-Surgeon Joseph C. Baily, U.S.A., now on duty at Fort Monroe, Va., to report to Surgeon Jonathan Letterman, Medical Director, for duty with the Army of the Potomac.

Assistant-Surgeon Harvey E. Brown, U.S.A., now on duty at Portsmouth Grove, R. I., to repair to New York city, and report to Major-General Wool, commanding Department of the East.

Medical Inspector W. H. Mussey, U.S.A., now on duty in this city, to report to General Kelly, commanding Department West Virginia.

By order of the Secretary of War,
E. D. Townsend,
Assistant Adjutant-General.

SPECIAL ORDERS, No. 283.

War Department, Adj. Gen'l's Office,
Washington, June 26, 1863.

14. Snrgeon James Holland, 1st Massachusetts Cavalry, is hereby honorably discharged the service of the United States, on account of physical disability.

By order of the Secretary of War,
E. D. Townsend,
Assistant Adjutant-General.

SPECIAL ORDERS, No. 281.

War Department, Adj. Gen'l's Office,
Washington, June 25, 1863.

9. The following officer, having tendered his resignation, is hereby honorably discharged the service of the United States:

Assistant-Surgeon John M. Huston, 48th Pennsylvania Vols., on account of physical disability.

16. The following officers (published officially May 25th, 1863), having failed to appear before the Military Commission instituted by Special Orders No. 53, current series, from the War Department, within the prescribed time, the President directs that they be dismissed the service of the United States, to date May 25, 1863, for the causes set opposite their respective names.

Disobedience of orders, failing to report for medical treatment in this city, as ordered.

Assistant-Surgeon Elbert Rowland, 127th New York Vols.

17. So much of Special Orders 109, current series, from this Office, as musters out of service Surgeon Herman B. Linton, 175th Pennsylvania Vols., for "inefficiency and neglect of the sick," is hereby amended so as to honorably discharge him from the service of the United States, to date January 13, 1863.

By order of the Secretary of War,
E. D. Townsend,
Assistant Adjntant-General.

SPECIAL ORDERS, No. 298.

War Department, Adj. Gen'l's Office,
Washington, July 6, 1863.

5. Surgeon T. Sim, U.S.V., now attending Major-General Sickles, U.S.V., will remain on that duty until further orders.

By order of the Secretary of War,
E. D. Townsend,
Assistant Adjutant-General.

SPECIAL ORDERS, No. 288.

War Department, Adj. Gen'l's Office,
Washington, June 30, 1863.

5. The following enlisted men are hereby honorably discharged the service of the United States, to date May 31st, 1863, having been appointed Clerks in the Surgeon-General's Office:

Hospital Steward E. J. Keferstein, U.S.A.

Hospital Steward M. H. Van Der Veer, U.S.A.

By order of the Secretary of War,
E. D. Townsend,
Assistant Adjutant-General.

SPECIAL ORDERS, No. 275.

War Department, Adj. Gen'l's Office,
Washington, June 22, 1863.

1. Leave of absence is granted the following named officers, on Surgeon's certificate of disability:

Surgeon J. G. Perry, 20th Massachusetts Vols., for thirty days.

5. Surgeon George Suckley, U.S.V., will report in person, without delay, for duty to Major-General Schenck, commanding Middle Department, as soon as his services can be dispensed with in the Army of the Potomac.

11. The appointment of Sherman Morse, as Assistant-Surgeon, 2d New York Cavalry, March 25, 1863, is hereby revoked, he having failed to report for duty with his regiment.

By order of the Secretary of War,
E. D. Townsend,
Asst. Adjutant-General.

SPECIAL ORDERS, No. 279.

War Department, Adj. Gen'l's Office,
Washington, June 24, 1863.

2. The following assignment of medical officers is hereby made:

Assistant-Surgeon James M. Shearer, 12th Pennsylvania Reserve Corps, now on duty with his regiment, to report to the Medical Director, Department of Washington, for hospital duty.

Assistant-Surgeon W. F. Norris, U.S.A., recently appointed, to report to the Medical Director, Department of Washington.

Assistant-Surgeon Michael Hillary, U.S.A., recently appointed, to report to the Medical Director, Middle Department, at Baltimore, Md.

Assistant-Surgeon Edward Cowles, U.S.A., recently appointed, to report to Surgeon W. S. King, U.S.A., Medical Director, Department of the Susquehanna, at Harrisburg, Pa.

Assistant-Surgeon S. M. Horton, U.S.A., now on duty at Memphis, Tenn., to report to Colonel M. S. Howe, 3d United States Cavalry, for duty with his regiment.

Assistant-Surgeon W. R. Ramsey, U.S.A., now on duty with the Army of the Potomac, to take charge of the General Hospital at Chester, Pa.

Surgeon L. H. Holden, U.S.A., now on leave of absence, to proceed to Pittsburg, Pa., and report to Major-General Brooks, as Medical Director of the Department of the Monongahela.

Assistant-Surgeon E. T. Whittingham, U.S.A., now on duty in the Army of the Potomac, to report in person to the Surgeon-General for duty in his Office

Assistant-Surgeon C. D. Brooks, 26th Michigan Vols., now on dnty in this city, to join his regiment without delay.

Assistant-Surgeon Warren Webster, U.S A., now on sick leave for New York, to report for duty to Surgeon Charles McDougall, U S.A., Medical Director, Department of the East.

By order of the Secretary of War,
E. D. Townsend,
Asst. Adjutant-General.

SPECIAL ORDERS, No. 285.

War Department, Adj. Gen'l's Office,
Washington, June 27, 1868.

8. Surgeon John F. Head, U.S.A., having been detailed as member of a Board of Officers, to assemble at Columbus, Ohio, on the 1st July, 1863, for the examination of Officers who may report at that place. under General Orders Nos. 61 and 100 of 1862, from the War Department, is relieved from duty as Medical Director at Louisville, Ky., to enable him to sit on said Board.

By order of the Secretary of War,
E. D. Townsend,
Asst. Adjutant-General.

Medical News.

The Physiology of Mormonism.—By Charles C. Furley, M.D., Assist. Surg. U.S.A.—A marked physiological inferiority strikes the stranger, from the first, as being one of the characteristics of this people. A certain feebleness and emaciation of person is common amongst every class, age, and sex; while the countenances of almost all are stamped with a mingled air of imbecility and brutal ferocity. This, in fact, is their true character; they being obsequious and yielding to their superiors—to strangers sullen and spiteful, while among themselves they are cold and unamiable. In the faces of nearly all, are defects, the evidences of conscious degradation, or the bold and defiant look of habitual and hardened sensuality—the women, with but few exceptions, shrinking from the gaze of the stranger, as if fully alive to the false and degraded position they are forced to occupy. Some seem overwhelmed with shame; others wear a forlorn and haggard appearance; while a few put on a cheerful air, affecting to be satisfied with their sad condition.—*Med. Press.*

Messrs. Wood, of New York, are about to publish a work on the Diseases of the Ear, their Diagnosis and Treatment, by Dr. Von Tröltsch, Surgeon and Lecturer in Würzburg, Bavaria, translated and edited by D. B. St. John Roosa, M.D., late House Surgeon in the New York Hospital, Surgeon for the Eye and Ear in the N. E. Dispensary.

Prof. F. H. Hamilton, Medical Inspector U. S. Army, has recently been twice made a prisoner by Morgan's guerilla band. The first time they stole his baggage and then set him free; the second time he was immediately released.

Original Lectures.

DISEASES OF THE RESPIRATORY ORGANS IN CHILDREN.

BEING A COURSE OF LECTURES PREPARED FOR DELIVERY DURING THE SPRING SESSION OF 1862 IN THE COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.

BY THE LATE
C. VAN ALEN ANDERSON, M.D.,
PHYSICIAN TO CHILDREN'S DEPARTMENT, DEMILT DISPENSARY, N. Y.

LECTURE IV.—PART III.

PERTUSSIS—ITS COMPLICATIONS.

Finally, gentlemen, hooping-cough may be complicated with some of the exanthemata, particularly with measles, to which it seems to be in some mysterious way related. In the majority of cases the convulsive cough succeeds the appearance of the eruption. The cough of the catarrh of rubeola, instead of dying away with the other symptoms, continues, becomes more frequent, especially at night, and soon assumes the kinks and the hoop; there we have the injection of the face, the vomiting, the expectoration of ropy mucus, and, in a word, all the symptoms of pertussis. This form of the complaint possesses neither its usual violence nor its usual persistence; but, on the other hand, is very strongly inclined to run into capillary bronchitis or pneumonia.

As there are no distinctive post-mortem appearances in a case of simple hooping-cough—as its mortality depends chiefly upon its complications, and as upon dissection we find only alterations that are due to them—the disease can hardly be said to have any pathology; but numerous and widely differing opinions have prevailed as to its *nature*.

It has been regarded as attributable to the inhalation of the eggs of a minute species of insect—to some irritating effluvia cast off from the blood into the lungs—to derangement of the intestinal canal—to a morbid change in the liver—to crude and bilious matter in the stomach—to inflammation of the larynx or bronchi, and to peculiar irritability of the glottis. Many authors consider that it is owing to disease of the brain and its membranes, and others again that it is essentially nervous or spasmodic, its true seat being undetermined.

The mode of death, you will remember, is usually either through the lungs or the brain; and it is in these organs that we shall find nearly all the structural lesions of importance. The vessels of the brain and its membranes are frequently discovered distended with blood, though this is not an invariable appearance, for it is sometimes absent even in cases of convulsion and coma; softening of the brain-substance is exceedingly rare; but we may now and then find a collection of blood in the ventricles.

The lungs present the anatomical changes which we know to result from the pulmonary complications. The mucous membrane of the bronchial tubes is more or less red, and their cavity is filled by mucus or by mucopurulent fluid. Several authors also notice a decided increase in the calibre of the air tubes, which is one of the consequences of inflammation of them. We may also discover more or less extensive collapse of the lung, characterized by the solidity and violet hue which we have before noticed. And to these may be added the lesions of pneumonia or of tuberculosis.

Dr. James Duncan seems to have hit upon the true idea of hooping-cough when he proposed to class it with the eruptive fevers; and however extraordinary this notion may appear at first sight, a little consideration will convince us of its value. It is evident that, while there is some disarrangement of the nervous system in pertussis, we can hardly call that a nervous disorder which attacks an individual but once in his lifetime, which is often epidemic, and sometimes contagious; but, on the contrary, we all know that these qualities belong peculiarly to the exanthemata. Like these febrile diseases, hooping-cough is oftenest met with in infancy and childhood, is preceded by a period of incubation and by a period of precursory symptoms, has a stage of augmentation and a stage of decline. It is also more closely allied with measles, because, like it, it often follows epidemic catarrh, is complicated by bronchitis and pneumonia, and terminates frequently in tuberculosis.

Many of its phenomena may be explained by a lesion which is often discovered in the bodies of those who die of it, namely, some disorder of the pneumogastric nerve. Thus, the frequent vomitings can be produced by an influence propagated through the filaments which ramify upon the stomach. The hoop which follows the expiratory cough depends on the spasmodic contraction of the glottis through the agency of the recurrent laryngeal. The swelling and lividity of the face, the epistaxis, and the various hæmorrhages which we have observed, are secondary phenomena resulting from the venous congestion of the capillaries, which is in turn caused by the complete emptying of the lungs of air. The accumulation of venous blood, also, in the vessels of the brain and spinal-cord, prevents a proper stimulation of these nervous centres, and very probably compresses them: whence result the headache, drowsiness, and convulsions, that appear during the paroxysm.

Hooping-cough being in all probability owing to some poison circulating in the blood, just as intermittent fever is, it is not unreasonable to suppose that pathological chemistry will at some future age furnish us with an antidote for it. But at present we are obliged to treat it very much as we do its relations, the eruptive fevers—that is, to let it run its course, and guard against its complications. It is a disease that is rebellious to all treatment, and yet we have an enormous list of specifics against it; a fact that we can explain by the length of the disorder, the fatigue which it causes, the impatience of the parents, and the small success of preceding treatment—which circumstances induce us to try our hand at it anew. We must not endeavor, then, to *cure* the complaint, for this we cannot do, but our efforts should rather be directed towards modifying its intensity, and preventing its intercurrent diseases.

To attain this object we have various means, and among them hygienic precautions will first engage our attention. The child should be kept as much as possible from cold and damp, but when the weather is clear and dry, it should have abundant exercise in the open air. Care should also be taken that the clothing is suitable to the season—light and cool in summer, warm and soft in winter—that the skin is kept perfectly clean, and the bowels regular, and that the food be well chosen, and given at proper times. The meals should not be very copious, but at the same time they may be more frequent than usual. The milk of the nurse is of course the best food for an infant at the breast, provided we assure ourselves that the woman is in a proper condition to produce a healthy secretion. Older children will require nourishment that is easily digested, such as light soups, fresh eggs, plenty of milk, baked fruits.

When the disease is preceded by the usual catarrhal stage, our treatment during that period will be extremely simple. As an equable temperature is desirable, our patient is to be confined to the house, and not allowed to wander about halls and passages where the irritability of the bronchi will be increased by draughts of cold air. A light and unstimulating diet, an occasional laxative, a mild expectorant, and if there be much wheezing, an emetic of ipecacuanha, every evening, will answer all indications.

If the disease pass into the convulsive stage, the cough and hoop being very slight, and the paroxysms few in the course of the day, but two remedies will be required—care and time. If, however, the intensity of the disorder be such that we are forced to have recourse to medicine, let us begin with those articles which will least debilitate our patient, and the administration of which can be continued for a length of time; for by this plan we reserve our strength for emergencies when it may be imperatively called for. The French speak highly of the subcarbonate of iron, given in doses of from five to fifteen grains, and remark that it is particularly useful in cases where the child is naturally delicate, and where the disease has debilitated him from its duration and intensity. The oxide of zinc, also, is another of these remedies which has been used upon the Continent with considerable success; and as it has neither taste nor smell, the child may easily be induced to take it. A powder containing a grain each of oxide of zinc and musk, and nine grains of white sugar, may be given every two hours to a child two years old.

Among the remedies most frequently resorted to are some of the narcotics. When I speak of narcotics, opium will, of course, be instantly suggested to you, and, indeed, it was a great favorite with the old physicans. At present, however, it is not so much used, for it favors cerebral and pulmonary congestion, produces restless prostration, a diminution of expectoration, and dryness of the fauces—symptoms not at all favorable. It is better to reserve it for certain special cases where the cough is so intense as to cause great agitation and sleepless nights; under such circumstances we may employ some of the milder preparations of it, such, for instance, as the camphorated tincture.

Belladonna, however, is deserving of more confidence in this disease, and has been very extensively employed both by German and American physicians. From my own experience I can speak very highly of its good effects, having used it in some two or three hundred cases. Acute bronchitis, and cerebral and pulmonary congestion, of course, contra-indicate it; and we should also be careful to begin with small doses, and watch it closely. In the Demilt dispensary one sixty-fourth of a grain of the extract is given to a child one year old, every three hours, and the dose is increased with the age. Some physicians direct it to be given in gradually increased doses, until its effect upon the pupil becomes evident, and some of the symptoms of narcotism are produced; but I have never found it necessary to carry it to this extent.

Lastly, hydrocyanic acid is countenanced by the great authority and experience of Dr. West. He begins with half a minim of the dilute acid every six hours for a child nine months old, gradually going up to one minim every four hours. It seems to him to exert an almost magical influence on the cough, diminishing the frequency and severity of the paroxysms almost immediately; while he acknowledges that in many cases "it seems perfectly inert;" and in others "exerts its peculiar poisonous action upon the system, so as to render its discontinuance advisable." I should advise you, therefore, when you have so many safe and more reliable drugs, to have recourse to this only with great reluctance.

The complications which appear in the convulsive stage require great judgment in their management. You are never justified in abstracting blood, or in adopting a depleting plan, because your object is to support the system, so as to enable it to overcome the disease. Bronchitis and pneumonia are to be met by efficient counter-irritation externally, and by expectorants, and even stimulants, internally. At the same time, having in mind the tendency there is to collapse of the lung in hooping-cough, and how much that tendency is aided and augmented by the copious accumulation of tenacious mucus in the bronchi, you will endeavor to keep these tubes free by the frequent administration of emetics.

If convulsions occur, we must remove their exciting causes as far as we can; the bowels are to be opened either by enemata or purgatives, the gums lanced, and warm baths resorted to. If we are treating the child with any narcotic, it should instantly be abandoned. Cold lotions to the head, leeches behind the ears, and sometimes blisters to the nape of the neck, are means that we may resort to. But as the convulsion generally arises from the violence of the cough and the repeated arrest of the circulation, our hopes of preventing or curing them are very slight indeed. Dr. Churchill, however, reports one case in which, though it terminated fatally, chloroform seemed to be of service.

The treatment of the third stage of pertussis depends much upon the nature of the case. If its course has been regular, change of air is usually all that will be required. If the bronchi continue loaded with viscid mucus, the skin cold and moist, and the pulse frequent and feeble, the administration of from three to five grains of alum every hour or six hours will be found useful. Where the complaint ends in tuberculosis, you will, of course, adopt the proper measures for that condition; and in all cases, even when the disease has been mild in its progress, you will be careful to avoid for a long time all circumstances which can give rise to pulmonary irritation. Tonics, such as iron or cinchona, will be needed to complete the cure.

I have only been able to give you, gentlemen, a sketch of the kind of treatment that is appropriate to hooping-cough. In the course of your studies you will discover an innumerable host of specifics for it; but you will finally become convinced that you cannot arrest the disorder, and that your wisest course will be to palliate it so far as you can, to detect the complications early, and treat them promptly, to put your patient under a wise system of hygiene, and then to trust to the conservative powers of the greatest of all physicians—Nature.

Original Communications.

REMARKS ON HOSPITAL GANGRENE.

By GEO. R. WEEKS, Surg. U.S.V.,

in charge of M'Pherson Hospital, 17th Army Corps, Depart. of Tenn.

While on duty in the Department of the Ohio I was requested by Surgeon M. Goldsmith, U.S.V., to personally observe and report any facts of interest in regard to cases of "hospital gangrene" that had been treated in the various hospitals in Louisville, Ky., of which he was Surg.-in-Chief. I personally observed at that post one hundred and fifteen cases, and six have occurred at this hospital since my arrival here.

In the collection of the facts at Louisville, Ky., I had access personally to many of the cases. I conferred with the surgeons in charge of the various hospitals, and those also in charge of the different wards. I also had access to the notes and case-books, from which sources the following *facts* were taken, and have been reported to the Surgeon-General:—

There were one hundred and fifteen cases treated in the various hospitals in Louisville, Ky. Of these one hundred and four were treated with bromine in some manner, and eleven by other remedies. Of those treated by bromine, three died: two of pyemia, and one of cellulitis, gangrene having been previously arrested, and the wounds were granulating. Of the eleven otherwise treated, three died of gangrene. Of those treated by bromine, eighty were treated with compound solution (Smith's formula), and twenty-four with pure bromine. The average time of arrest in the cases treated by compound solution of bromine was 8·19 days; those by bromine pure, 2·12 days; and of those otherwise treated, 14·66.

I observed this general fact, that, as the strength of the remedy was increased, the process was shortened in a corresponding ratio also; also, that, where bromine pure was properly and efficiently applied, only one application was required to arrest it, although three or four days were afterwards necessary for the development of granulations.

Another and more important fact was observed, *i.e.* that the local application of bromine to a gangrenous surface had a *direct* effect upon the constitutional symptoms, which were immediately lessened in violence, and the constitution rebounded as if relieved of a burden: this was the case with those who had no constitutional treatment whatever.

So constantly was this observed, that I am inclined to adopt the following—

PATHOLOGICAL VIEWS OF THE DISEASE.

That, primarily, it is entirely *local* in *character*. That the constitutional disturbance is secondary, the "materies morbi" being received into the circulation by absorption, directly from the traumatic surface, where the morbid element is deposited or manufactured during the *early part* of the chemico-vital changes that take place during the establishment of the putrefactive fermentation in or upon the sore. In support of this view I would present the following reasons:—

Many cases were observed where both legs were wounded with the same ball; *one only became gangrenous.* If the morbid agent was in the blood, why were not all alike affected, as all were supplied from internally by the same material? One case was reported where gangrene attacked the dorsum of the foot, there being a small abrasion there of the cuticle. The original wound was not in the calf of the leg. I ascertained from his nurse that he would not keep his feet covered, and that the original wound had been dressed by simple cerate, and never at any time had shown a gangrenous disposition. I also observed that the constitutional symptoms *followed* the local, not appearing until several days after the wound had taken on a gangrenous character.

Perhaps the observance of the past will warrant me in saying that this disease is *aggravated*, if not *produced* by crowded hospitals, small amount of air-space, and the decomposition of animal matter which is held in solution or in vapor in the atmosphere. If so, it must enter the system by endosmosis through the pulmonary structures, mingled with the current of the blood, and distributed by the arteries to distant parts of the system; or be directly absorbed from the wound, which, I think, is the more rational idea, and which is capable of explaining most of the phenomena observed. I cannot quite see how, in gaining access by endosmosis through the cell wall and pulmonary structure, it does not leave some of its morbid element at this point, thus affecting the bronchial mucous membrane. We have the right to expect, at least, that its first impression would be the most deadly.

Where obstruction in the lungs has occurred, or metastatic abscesses have been found, the obstruction was on the cardiac side, several specimens of which I now have in my possession, where the bronchial mucous membrane is not involved, but where the capillaries and smaller vessels are entirely occluded, as I think, by particles of thrombus, detached either by the force of the current passing by and carried with it until arrested by the calibre of the vessels, or formed by the septic condition of the blood received from the wound.

The virus being absorbed from the wounds and mingled with the blood coagulates the plastic portion, and thus forms thrombus, thus impoverishing the remainder and rendering it aplastic. This process (the formation of thrombus) is a gradual one, and may progress or remain stationary in the vessels after the process is arrested locally.

Virchow has many facts bearing upon this question, *i.e.* the formation of thrombi, and the transformation of the cell content, but my limit will not permit the discussion of these questions. But I have found in the examination of all cases after death in this class of diseases, thrombi, and in those of long standing I have found "*occlusion*" of the smaller vessels, and what I denominated "mechanical pneumonia," in which condition the smaller vessels and capillaries were thus obstructed; and where the portion of thrombus thus detached was larger, we had the condition of pyæmia. In no case have I observed it in the liver, although I have frequently sought for it there. I believe that over these conditions bromine has a specific influence, and if properly used at an early period of the disease, will surely arrest it and its sequences. Very much depends upon the time when the application is made, which should always be as early as possible, in order to avoid its consequences.

It holds superiority over nitric acid, for the reason that it is not so destructive to living tissue, and can be used where the acid is inadmissible on periosteum, tendons, and vessels, without destroying their integrity. It is of great utility in cases of secondary hæmorrhage, where the artery has sloughed, three cases of which have occurred where arteries were tied in gangrenous sores with complete success, thus enabling us to extend the rule of Guthrie to these cases—"always to tie a bleeding vessel in the wound, if it can be reached at that point."

I have tied the anterior tibial artery upon the face of a gangrenous stump, and arrested the process by the use of bromine, and the patient recovered as well as by a primary operation. The brachial and dorsalis pedis artery were tied under the same circumstances, with the same result. The patients are now well. Bromine arrests the gangrenous process so effectually and certainly, that I am inclined to think this procedure good practice. The six cases that have occurred since I have been in this hospital have been promptly arrested by one application, except in the case of Adam Brangle, of Co. I, 1st Regt. U.S. Infantry, who was admitted to this hospital, June 15, 1863, in a profound state of pyæmia. He had been wounded in the hand by the premature discharge of a cannon, and an effort was made to save two of his fingers at Third Division Hospital; gangrene supervened, and secondary amputation was resorted to at the middle of the forearm; gangrene attacked the stump, and extended up as far as the elbow. Absorption had already taken place upon his admission into the hospital, as pneumonia was already apparent from auscultation in the upper lobe of the right lung. I treated the arm with pure bromine, which entirely arrested it on the second day; granulations made their appearance on the fourth day. The arm continued to do well until the time of his death, which occurred on the 26th ultimo. An autopsy revealed thrombi in nearly all the vessels, and "mechanical pneumonia," which was the actual cause of death. Thrombus was found extending the full length of the pulmonary artery, and the smaller vessels were completely occluded. At numerous points small abscesses were in process of formation. The lungs were very much enlarged and solidified; the bronchial mucous membrane was slightly congested. Upon making a section through the lung, the thrombi in the smaller vessels could be distinctly seen covering the entire surface with red and deeper colored points, in the large ones becoming almost black—the smaller ones resembling in appearance coagulated venous blood, except that they were more firm and tenacious.

I believe the best mode to apply the bromine to be this, *i.e.* With a pair of scissors or a scalpel cut away all the sloughs down to the living tissue (or until by hæmorrhage you are warned to go no further), being careful to clean out all nooks and corners putting off from the central sore, or where it has dipped down into intermuscular spaces or followed along the cellular plane, where it is apt to escape observation. Then wash the wound with warm water, and dry with a pledget of lint or charpie; then apply pure bromine to the entire surface with a mop or swab, and if cavities exist inject it into them with a small glass syringe, and with a pine stick press it up so as to mix it with all the pulp or pultaceous matter that may still linger in the wound. Simple dressings should then be applied, and the sore excluded from the atmosphere for two days, when warm-water dressings should be used to facilitate the detachment of the slough, after which points of granulations will be noticed springing up, and, if no fetor is present, the arrest is complete. If some fetor still exists, it is evidence that some points have been missed and should be retouched, observing the same rule as in its first application.

The wound should then be treated on general principles. If the granulations become weak, I have found much benefit from the use of a weak solution of bromine, say forty gtt. compd. sol. bromine to ℥j. of water, applied morning and evening.

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A CASE OF SUCCESSFUL OVARIOTOMY.

By J. GRAFTON, M.D.,

WATERTOWN, JEFFERSON COUNTY, N.Y.

This case is unusually interesting, from the adverse circumstances attendant upon the operation. The patient had been afflicted with spinal curvature from the age of two years. She is now 49; has not stood upon her feet for forty-seven years; has been more or less confined to her bed and room during her whole life, never being able to leave either unless carried in the arms of her attendants. Her spine is curved almost at an acute angle, her thighs flexed on the pelvis and drawn up on the abdomen, knees permanently flexed at almost an acute angle; has no lateral motion between the thighs, there being scarcely sufficient space between them to allow the passage of my arm in making the necessary incisions for the removal of the tumor. As would be expected from this condition of things, she is extremely feeble and emaciated; nervous debility, irritability of the mucous membranes, dyspepsia, and sore mouth, have been almost constant symptoms.

On the 1st of June, 1862, she first observed her present difficulty, the earliest symptom being "a feeling of pressure" about the bladder, with frequent micturition, and a sense of fulness in the lower part of the body.

There has been but little disturbance of the catamenial function, it never having been suspended at any time for more than ten weeks: is regular now. She did not discover any signs of external enlargement until last December, since which time she has increased rapidly, and, in consequence of her spinal deformity, appears now much larger than a woman at the full period of pregnancy. On the 14th of May, in consultation with the family physician, Dr. R. Kinney, of Mannsville, I explained to her the nature of her disease, its tendency to death, and described the different modes of treatment—palliative and radical—advising, in view of her deformed condition, which induced me (erroneously) to think that life could have no charms for her, the palliative operation of tapping, and subsequently, if she wished it, injection of the sac with iodine, if the preliminary tapping proved the cyst to be *unilocular.*

On the 14th of April I tapped her with a large trocar, and, owing to the extreme viscidity of the contents of the cyst, did not remove more than two ounces of thick white gelatinous fluid, and this amount by dragging with the fingers through the canula. I therefore closed the wound, and informed her that *excision* only could afford relief; that in view of her feeble condition and deformity, which would render after-treatment less likely to be successful, I could not advise the operation, but *would make* it at her request, to relieve her, when her suffering from pressure became intolerable.

On the 11th of May, assisted by Drs. Kinney, Clark, F. Lowe, Sherman, Buckly, and Ferrol of Oswego county, in conformity with her request, I removed the tumor by the large incision while she was under the influence of chloroform. The steps of the operation did not differ from those adopted by other operators, and were as follows:—

1st. An incision down to the sac, sufficiently enlarged to admit the hand into the cavity of the abdomen to make the necessary explorations. 2d. The careful separation of the numerous adhesions on its anterior and upper surfaces. 3d. Enlargement of the incision to two and a half inches above the umbilicus to give exit to the tumor, which was multilocular, and also for the purpose of allowing of the more careful separation of the adherent omentum. 4th. The passage of the hand behind the tumor, so as to enable me to press it firmly forward into the lips of the wound BEFORE TAPPING IT, so as to prevent the escape of any of its fluid contents into the abdominal cavity, *and thus avoid unnecessary sponging,* which must increase the liability to irritation. In this case I had previously discovered by a former tapping that I could not empty the cyst sufficiently to allow its removal by a canula, although I had provided myself with one whose calibre was one inch. 5th. The tumor proved to be, as diagnosed, the right ovary, and multilocular. The pedicle was very broad, and too short to be secured outside the wound in Spencer Wells's clamp; consequently, I passed through it a double ligature, and encircled both again with a stouter one, and then fastened it in the lower angle of the wound, transfixing it with a pin passed through the *integuments only.* 6th. The careful replacement of the omentum, which, in consequence of its adhesions, had necessarily been much disturbed, and gentle sponging out with a soft warm sponge what little blood had escaped into the abdominal and pelvic cavities. 7th. The careful closing of the wound with six long silver pins, passed one inch from the line of incision on the right side obliquely through the integument, so as to transfix the peritoneum about half an inch from the line of incision, then through the peritoneum at the same distance on the left side, and out through the integument one inch from the line of incision on the opposite side—thus bringing two surfaces of peritoneum together, and insuring that rapid closure of the internal wound which always takes place between serous membranes from the earlier formation and organization of the lymph thrown out. The gaping intervals between the pins were closed by three fine iron wire sutures.

I should note here that the tumor after its removal weighed fourteen pounds; that the abdominal cavity contained about a quart of reddish serum; and also, what excited some gloomy forebodings as to the result, that the *peritoneal* lining membrane of the left side of the abdominal wall looked purple, closely resembling in color the strangulated sac of a bad hernia.

After carefully swathing the abdomen in warm flannel she was placed in bed, apparently none the worse for the operation, of which she had had no consciousness. The amount of blood lost did not exceed a breakfastcupful. Warm water and laudanum dressings ordered, with small doses of morphia, if required.

On the 15th of May I visited her again. Found her free from all evidences of peritoneal inflammation; removed the four uppermost pins; wound healed; pulse seldom under 100, now 120; tongue clean; bears firm pressure everywhere excepting over the region of the removed ovary; no tympanitis; has urinated without the use of the catheter. 18th.—Continues to improve. Ordered the two remaining pins to be removed: to take a dose of oil, as injections fail to operate. 21st.—Visited her again. There was sloughing about the two lower pins, which still remained in place; removed them; above the wound was entirely healed; has had no peritoneal inflammation; no tenderness on pressure; has for the past day retention of urine; drew off about a pint with the catheter. 25th.—Bowels have, from the use of cathartics, moved somewhat too freely; some little sloughing in the site of the retained pins; redness of the integument there passing off. Pulse 116; tongue slightly brown; has some appetite; should take more food and stimulants; about these matters is somewhat notional. June 1st.—Pulse 102; tongue clean; evidently improving; bladder still requires use of catheter; pedicle, which has been carefully covered with collodion, has almost entirely sloughed away; wound everywhere cicatrized, excepting for about three-quarters of an inch around the pedicle; ordered to be well dusted with white oxide of zinc powder; charcoal bags, with which the pedicle had been enveloped, to be discontinued. 8th.—Pedicle has come away, and the wound is now entirely healed; bowels acting well. Dr. Kinney reports "that as far as the operation is concerned she may be said to have entirely recovered." She is, of course, weak and feeble, as she has always been; needs more nourishment and stimulants. Her bed-sore seems now to be her only trouble; this, in consequence of her deformity, rendering it necessary for her to lie upon her back and resting upon her feet, is more than usually difficult to treat, as we cannot give her the advantage of change of position. July 3d.—Since this she has remained much the same; has regained the control of her bladder, and suffers only from debility; the wound is everywhere firmly cicatrized. She is anxious to ride out, believing that exercise in the open air would increase her desire for food and give her strength. Whether she regains her usual measure of feeble health or not, which is doubtful, there can be no question as to her recovery from the effects of the operation.

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REMOVAL OF THE ENTIRE LOWER LIP,

WITH PORTION OF CHIN AND TWO-THIRDS OF THE BODY AND BASE OF THE LOWER JAW OF THE RIGHT SIDE FOR EPITHELIOMA.

By G. MILIANO, M.D.,

OF NEW YORK.

Mr. J. C. about five years ago noticed growing on the right side of the median line of his lower lip a small hard tumor, for which during all that time he took no medical advice. Finally, as a last resource, and to save or prolong this gentleman's life, an operation for its removal was proposed. When I was called in I found the patient quite pale and disconsolate, suffering much pain and excessive discomfort from having been for months past unable to sleep except when he was under the influence of an opiate. The diseased mass, now more than three and a half inches in length, stretched across from one commissure of the mouth to the other, while it rolled down to the beginning of the prominence of the chin. It looked very much like a bursted sausage. The saliva flowed freely over the tumor, to the great distress of the patient. Two inches beyond the median line of the chin, on the inside of the mouth, the disease had extended to two-thirds of the body and base of the lower jaw; and there existed a large and deep abscess within that bone, which pointed through congested and unhealthy skin without. The patient, as well as his friends, being desirous that an operation should be performed without delay, I appointed the next day of my first visit, December 4, 1862, for its execution, at his house. It was accomplished in this wise: Placed upon a table before a well lighted window, and his head elevated on a couple of pillows, the patient was rendered insensible by chloroform. Two oblique incisions, one starting from each commissure of the mouth, in a manner so as to transfix all the soft parts, were then made to descend to a little above the superior central margin of the chin, and unite there in the form of the letter V, thus isolating the entire deformed lip. These incisions were then extended down on either side of the chin to near the base of the jaw, which went to form, with the previous ones already made, the letter X. Next, one more incision, three-fourths of an inch in length, was run along the side of the bone, to join the inferior lateral right angle of the X. The fungoid lip was then cut away, and, the flaps marked out having been dissected off the adjacent parts, the diseased jaw came into full view. A second incisor tooth of the right side was then extracted, and the third molar of the same side not existing, both these spaces were made use of for the introduction of the saw. The tongue was now held to one side by an assistant, a fine straight saw was then applied, and the jaw separated first in front and then at the side. The soft parts were then carefully detached from the bone, and the jaw removed; a portion of the chin for an inch and a half in length and half an inch in breadth, also diseased, was trimmed off. The upper edges of the flaps of either side were now raised and drawn up in a line with the superior lip, while the lower edges were brought together in an oblique direction which went from the centre of the mouth to the right side of the chin, the whole then being strongly retained in place with pins and the twisted suture. In this way the external lost parts were restored. The incision at the side was left open for dressing with lint the cavity left behind by the loss of the jaw, and for the support of the edges of the remaining ends of the bone, as well as the escape of discharges from the mouth, and favoring the early granulation and cicatrization of the wound. There was comparatively but little bleeding, the two labial arteries only being cut. The operation was necessarily protracted.

On awaking, the patient was well pleased with the exchange of his shocking looks for regular features. Everything went on well, so that at the end of nine days all the pins and the sutures had been removed, and in a few days after the patient was able to be shaved. The wound at the side was left open much longer, daily injections of a weak solution of quinine being used to the parts at each dressing; the patient being fed in the meantime on animal broths and other nutritious liquids and cooling drinks, by injecting the same into his mouth through a silver canula. In five weeks more the wound at the side healed, and the fibrous tissue having become consolidated in place of the old jaw, the patient was discharged cured, and can now sleep and eat satisfactorily, having gained flesh since the healing of the wound. Three months after the operation, patient was doing well, and had been out daily for the previous four weeks, his lip and chin being now natural with the exception of a very narrow cicatrix, which his whiskers will cover.

42 University Place.

Reports of Hospitals.

JARVIS U. S. ARMY GENERAL HOSPITAL.

GUNSHOT WOUND OF LARYNX, FOLLOWED BY ŒDEMATOUS SWELLING.—TRACHEOTOMY PERFORMED.—RECOVERY.

By DEWITT C. PETERS, Ass. Surg., U.S.A.,

SURGEON IN CHARGE.

Capt. J. S., 53d Penn. Vols., aged twenty-four years, was admitted July 5th, 1863.

The patient states that July 2d, while awaiting orders with his company at Gettysburg, he received a wound of the neck, which bled so profusely that he had to be carried to the rear, where simple dressings were applied. The hæmorrhage continued for some hours, and finally stopped of its own accord. He was sent with other wounded to this city, and thence to this hospital. At nine o'clock A.M., July 5th, his case was examined by the attending surgeon, who found him bright, breathing easy, pulse 96, and able to converse without difficulty. There was no excessive swelling about the neck; the wound had closed, and no emphysema existed. The patient informed the surgeon that for two days air escaped from the wound at each expiration, and now it had entirely ceased. The wound was supposed to have been made by a buckshot. It is located over the centre of the left plate of the thyroid cartilage. It is about one-quarter of an inch in length, and its course is directly backwards. Where the shot lodged could not be ascertained, but it must have passed through the larynx. The patient's symptoms after admission into the hospital soon became alarming. He fell asleep in a sitting posture, and his dyspnœa was most marked. At twelve o'clock M. his pulse had increased to 116 pulsations per minute, and his breathing was more labored. The patient's chest and face were covered with a cold perspiration, and his expression was extremely anxious. The symptoms indicated that the officer was in a critical condition, and demanded active steps to be taken to save his life. The swelling and œdema around the seat of injury, both internally and externally, were rapidly on the increase;

emphysema had set in, and extended down the chest, especially on the left side, as far as the false ribs. A consultation of surgeons was held, and it was decided to perform tracheotomy. The instruments selected for the operation not being at hand, they were kindly furnished by a distinguished surgeon of this city. A straight incision was made, commencing over the cricoid cartilage, and was carried downwards in the direction of the median line for about one and a half inches through the integuments. The thyroid gland was exposed, and was found greatly distended and infiltrated with air, fibrin, and bloody serum, as indeed were all the tissues. By carefully dissecting the parts on a grooved director, the lower edge of the cricoid cartilage and the upper ring of the trachea were finally reached. A grooved tenaculum was hooked through the trachea just below the cricoid cartilage, and held firm by the hands of an assistant, with the handle resting on the patient's chin. A narrow sharp-pointed knife, guided by the groove of the tenaculum, was then inserted to perforate the trachea, which, owing to its unusual and great thickness, caused considerable impediment to the first attempt. The length of the blade passed out of sight without accomplishing the object, and the patient uttered a complaint of too much pressure. The tenaculum was still steadily held while further dissections and slight enlargement of the bottom of the incision were made. The second attempt proved less difficult, and was immediately followed by the escape of bubbles of air. The fresh wound was thoroughly cleansed, and through the opening a blunt-pointed narrow knife was passed and carried downwards and forward until at least three rings of the trachea had been divided. A very little blood escaped into the trachea, and one or two explosive efforts cleared it of these small clots and a quantity of tough mucus, and the patient breathed easily through the new opening. The operation was completed by introducing a large-sized Dessault's tube, which was properly retained in position in the usual manner. There were no ligatures required, and the amount of blood lost was insignificant. The relief experienced by the patient was instantaneous, and a change for the better in all his alarming symptoms was immediately noticed. His pulse fell to 96 pulsations per minute, and he was soon enjoying a pleasant sleep.

July 6.—The patient's condition is much improved, the swelling is subsiding, and the wounds look healthy. The treatment consists in keeping the patient quiet, giving him flaxseed tea to drink, and fluid nourishment.

July 9.—The patient continues to improve, and as the swelling of the neck has entirely disappeared, the tube was removed and left out. He was watched closely, and on the following day he commenced breathing freely through the natural passages.

July 18.—The wounds have almost healed, the patient walks about, and his voice is as strong as ever. Being anxious to return to his home, he was discharged cured.

Remarks.—The operation performed in this case is the one recommended by M. Chassaignac, of Paris. The steps of the operation were not familiar to me, and I am indebted to Dr. Christopher Johnson, of this city, for its adoption. I consider it preferable to any other I have witnessed, and should judge it was particularly applicable in children, where it is all important to retain the larynx and trachea under perfect control during their struggles. The operation was conjointly performed by Dr. Johnson and myself, and I have been truly pleased with the result.

* * *

Powdering Aloes and Myrrh.—Aloes is easily reduced to powder in winter, but in summer it becomes agglomerated so as sometimes to form one solid mass. According to M. Wollweber, this inconvenience may be obviated if we submit the aloes to a preliminary artificial drying until it becomes spontaneously reduced into powder. The same procedure applies to myrrh powder.—*Bull. de Thérapeutique*, vol. lxiii., p. 359.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, Feb. 25, 1863.

DR. D. S. CONANT, PRESIDENT, IN THE CHAIR.

FREQUENCY OF CHRONIC UTERINE INFLAMMATION WITHOUT SYMPTOMS.

Dr. Finnell presented a uterus, illustrating, in a marked degree, what has generally been termed chronic induration. The organ was removed from a lady thirty-five years of age, who died of pneumonia, and who during lifetime had not at any time complained of symptoms referable to uterine trouble. In remarking upon the specimen, Dr. Finnell expressed his belief that it was an error to suppose that chronic induration of the os and cervix uteri carried with it that amount of importance which too many were disposed to ascribe to it. He had for some time back made it a point to examine the condition of the os in autopsies, and had found that it had borne no sort of relation to any symptoms that might have been complained of during life. The pelvic pains so often referred to and complained of, he believed could in most instances be explained in another way.

Dr. Conant stated that he had met with a great many cases of chronic induration of the cervix which were associated with pelvic pains. He had several of such cases where the hardening had been so great that the disease had been pronounced scirrhus. In two cases, where actual cautery had been used, not only had the pelvic neuralgia been relieved, but both women conceived: one bore a child, and the other, when last heard from, was in her seventh month of gestation. He believed that in almost all cases where there was induration of this part of the organ, there was more or less displacement; sometimes there was flexion of the cervix either forward or backwards. He could not explain the reason for the pelvic pains, other than supposing them due to reflex action, but he was certain that in most cases the sufferings could be alleviated, if not altogether relieved, by various local applications to the diseased os.

Dr. Furman referred to a case which he had treated for the past three years for hypertrophy of the cervix, and in which at no time had any pain been complained of.

Dr. Conant did not think that such a case could be considered under the head of induration.

Dr. Finnell alluded to a case which had been pronounced one of chronic induration of the os by several physicians, and which he had subsequently examined, and had failed to detect anything abnormal. The patient had been under a variety of treatments, which seemingly had been of no avail. By the advice of Dr. Finnell she finally gave up all medication, and in a few months was entirely well.

EXPECTORATION OF CRETACEOUS TUBERCLE.

Dr. Finnell presented a second specimen, which consisted of small pieces of cretaceous tubercle that had been expectorated by a clergyman who for some time previously had been suffering from a harassing cough. The patient was in good health, and presented no physical signs of tubercle.

Dr. Flint stated that he had frequently met with cases of expectoration of cretaceous tubercle, but the most striking instance was one which had come to his notice many years ago, where a patient had coughed up from time to time a sufficiently large number of calculi to supply all the medical men for miles around with specimens. That patient had well marked physical signs of tubercular disease. He was advised to change his habits of life, which were sedentary, and go out west, which he did. He became a farmer, and at the end of fifteen years he was in perfect health. Dr. F. stated that the calculi formed as a consequence of the absorption of all the animal matter of the tubercle, leaving the deposit of earthy salts.

Dr. Finnell thought that the existence of concretions was presumptive proof against extensive and progressive tubercular deposit. He had often met with cicatrices at the apices of lungs, but in the majority of cases he attributed the cause to the contraction of fibrinous deposit outside the lung tissue, and not as the direct result of the contraction and disappearance of a pulmonary cavity.

Dr. Conant corroborated such a statement, and remarked that in cicatrices of pulmonary cavities, in addition to the bands usually met with, there were trabeculæ extending in different directions.

ABSCESS OF LIVER AND BRIGHT'S DISEASE.

Dr. Loomis presented a specimen of abscess of the liver, removed from a man forty years of age, who was admitted into Bellevue Hospital on the twentieth day of February, in an extremely feeble condition, attended with marked pallor. Aside from this he presented absolutely no sign of disease whatever. He simply gave the history that he commenced to grow weak and emaciated about seven weeks before, and that since then he had been gradually failing. He lingered but a few days after his admission, and died without an examination having been made. The autopsy revealed all the organs of the body healthy, with the exception of the liver and kidneys. The former organ was cirrhosed slightly, and at the posterior and inner surface of its right lobe there was a cavity containing three or four ounces of a tenacious semi-fluid substance, having some of the characters of pus. The wall of this cavity was on one side formed by the kidney, the capsule of which was abnormally thickened, while the organ itself was the seat of fatty degeneration. All the other organs of the body were healthy.

MUMMIFIED HEADS.

Dr. Merritt presented two mummified heads of Peruvian Indians. The bones had been removed, and the heads had shrunk to the size of a monkey's, yet the features were perfectly distinguishable, and the skin smooth. The hair was long, straight, black, and glistening. The points of interest were the uniform shrinking of the parts, while at the same time the surface of the skin showed no signs of shrivelling.

EXSECTION IN MORBUS COXARIUS.

Dr. Sayre presented three specimens. The first was from a boy five years of age, who had suffered from morbus coxarius for three years, at the end of which time it had advanced to the second stage, the muscles being rigidly contracted, and the patient suffering the greatest agony. Dr. Sayre saw the case in Yonkers, the place of residence of the patient. He divided the contracted muscles, and applied the pulleys with the greatest relief, and in the course of a short time the child was able to get about comfortably. Last fall, however, the patient fell upon the affected limb, and trouble in the hip recommenced, resulting in the formation of an abscess and numerous sinuses connecting with the joint. He was brought to Bellevue Hospital on the 10th of last December, very much emaciated, and in addition to the condition of the hip already referred to, there was noticed a diffused swelling resembling phlegmonous erysipelas, situated over the lower portion of the abdomen. The sinuses in the neighborhood of the hip were freely laid open, and fomentations were applied to the abdominal swelling. The patient running down very rapidly, an operation for exsection was decided upon, notwithstanding no dead bone could be reached by the probe. On cutting down upon the dead bone, it was covered by such a thick layer of periosteum that it was at one time doubtful whether any sequestra existed at all. The acetabulum was perforated by the head of the bone. Besides this opening there was another which communicated with a large abscess underneath the iliac fossa, accounting for the swelling of the lower portion of the abdomen. The boy progressed very well for several days, when pneumonia of the left lung supervened, and he rapidly sank and died on the fifteenth day after the operation. The head and neck of the bone were removed in the operation, and the extremity of the sawn surface was found covered with soft, healthy-looking granulations. The periosteum which was peeled off from the necrosed bone was also found studded with osteophites.

The second specimen, consisting of portions of the head, neck, and trochanter major, was removed from a patient thirteen years of age, who had suffered from morbus coxarius for seven years. The disease, however, was very slow in progress, and at one time it was thought that it had been entirely arrested. But in the course of a few months after this the trouble reappeared, and soon resulted in the formation of numerous sinuses in the neighborhood of the joints. The thigh was flexed upon the pelvis at an acute angle, the knees drawn up, and there was a large bed-sore over the opposite trochanter. Although no dead bone could be reached through the sinuses, Dr. Sayre was enabled by the character of the deformity to be positively assured that it existed. On putting the finger into the rectum a large abscess was discovered, which communicated with the joint through the sacro-ischiatic notch. In this case also, as in the first, on cutting down upon the diseased portion the periosteum was found very thick, and an involucrum was commencing to be formed. Dr. Sayre decided to saw off the bone below the trochanter before luxating the head, which left the complete envelopes of periosteum *in situ*, the necrosed and separated portion being without the least difficulty turned out of its bed. The operation was performed a week before, and the little patient at last accounts was doing well. In both these instances Dr. Sayre thought that a lesson could be learned not only to operate early, but to rely upon the position of the limb as a diagnostic sign of the existence of dead bone.

The third specimen presented by Dr. Sayre was one of false joint, occurring in the middle and upper third of the ulna of a woman thirty-eight years of age, who for three years previously had been suffering from an ununited fracture. He cut down upon the parts with a view to roughen the ends of the bones and invite union of the fragments, when he discovered the existence of an almost perfect joint, and exsected it. The joint was surrounded by a ligamentous membrane, and had a regular cartilage of incrustation covered by a secreting membrane. The existence of the *bonâ fide* tissues composing the said joint was proved beyond question by a microscopical examination by Prof. Austin Flint, Jr.

Dr. Conant presented a lower jaw sawn in a manner to illustrate a case of fracture which he had under treatment. The fracture extended through the middle molar tooth obliquely backwards to the angle of the bone, and was the result of a kick received in a quarrel. The lower extremity of the fragment, in consequence of the attachments of the masseter and pterygoid muscles, was drawn upwards and inwards, while the rest of the jaw was deflected towards the injured side in such a way as to produce a hideous deformity. Knowing the difficulty of keeping the fractured ends in apposition, Dr. Conant conceived the following simple and ingenious method of treating the case:—He passed a stout wire through the body of the bone, carefully avoiding the inferior dental canal, and then twisted the two ends around the wisdom tooth of that side. The result was perfect apposition and removal of the deformity. The patient could open the mouth without difficulty.

The Society then adjourned.

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Dr. Henry S. Hewit, Senior Surgeon in the Volunteer Medical Staff U. S. Army, was taken prisoner at Jackson, Miss., while remaining with the wounded. He was afterwards removed to Richmond, Va., and released. After a short residence at Bridgeport, Ct., to recover his health, he has again returned to the army of **Gen. Grant**.

A medical picnic is stated to have been held by the members of the profession at Southampton, England.

American Medical Times.

SATURDAY, AUGUST 1, 1863.

MEDICAL EXPERTS.

Among the public services rendered to the cause of humanity and justice on the part of our profession, one of the most important and difficult as well as most perilous, is that of assuming the character and fulfilling the obligations of the scientific expert. The word "Expert," in itself, has a peculiar significance; excludes all doubts, conjectures, and expedients on the part of the witness in a court of justice; and demands real, positive, and exact knowledge as it exists at present. We cannot say of an expert, he is *ignorant*, without using a contradiction of terms. The general practitioner cannot be an expert in all branches of our art. If a physician is so qualified in one branch as to be truly an expert, it is presumptive evidence that he is not qualified to act in that capacity in any other department.

In regard to medico-legal questions, of insanity for example, it is to be observed that some are very difficult of solution. In the elucidation of such questions before courts, men who have made them the special object of study, and have had peculiar facility for their investigation in asylums, are alone, exclusively of all other physicians, to be called experts in the real sense of that word. In cases in which it becomes necessary, for the purpose of satisfying the ends of justice, to submit certain substances, or the contents of the stomach, to careful chemical analysis in order to ascertain by the aid of delicate tests whether a man has been poisoned or not, the practical chemist and toxicologist will be called to give their opinion. The same is true in mechanical science or engineering. When obscure points at issue are to be decided, a diploma would be considered of small value, but a well reputed practical and scientific man alone will solve the difficulty to the satisfaction of justice. No one will dispute the credibility of the testimony of the true scientific expert, and he is a real and efficient counsellor of the court.

Nothing can be more palpable than that in all civil or criminal suits of law in which medico-psychological questions are involved, practical men, whose lives have been devoted to the study of mental diseases, can be alone competent to pronounce on points coming strictly within their province. If a medical man prove incompetent, he defeats the ends of justice, and destroys the confidence that ought to be reposed in our profession. Unfortunately, physicians are too often induced from some motive to volunteer as experts, and to give evidence for the party in whose favor they are especially prejudiced. In their evidence they declare themselves able to fulfil the obligation of their oath, and, as in the case of lawyers, think they may accept and defend any cause. This is a great mistake, and the difference of the two avocations in this respect is striking. It is plain that an accused person must in all cases have legal advice. Whether guilty or innocent, every prisoner should be dealt fairly with according to law. Besides, the authority of an advocate and of a physician is not of the same kind. The pleadings of an advocate leave court and juries free to appreciate the value of legal discussions; but the expert is pledged by oath to state nothing but the truth, and his opinions are accepted by juries as the accurate deductions of knowledge. The physician who plays the part of an advocate assumes a fearful responsibility, and may defeat the ends of justice.

The differences of opinion amongst physicians, and their mutual jealousy, has often been magnified, and is very generally deprecated by judges and lawyers; but we believe that such differences, especially in civil cases, may fairly exist. In certain suits of a criminal character the proper explanation of facts must be given in the form of theory. Reasoning upon the same facts, medical men, like others, may and will arrive at different conclusions. These conclusions, though different, are, however, honestly entertained, and are truly the legitimate deductions from the facts presented and interpreted by science. It would be manifestly wrong to insist that medical men, when on the stand, shall entertain the same views, and follow the same inductions, or that experts should act the part of judges. Medical witnesses are but *men*, and therefore liable to the infirmities of human nature.

In several countries of continental Europe (not in England, where the same proceedings exist as here), legal experts are called in courts either by the presiding judge, or by the parties, to give their opinion, which must be based, first, on a written report, and afterwards must be orally explained by the experts while on the stand. They are cross-examined, and subjected to subtle questionings, and are often unfairly handled by unscrupulous advocates. But from this fiery ordeal an honest expert comes free from any imputation of dishonesty. If this course were pursued in our courts it would be a decided improvement. There would then be much less of that lax and ill-digested evidence which too often dishonors medical testimony, and renders its influence nugatory.

THE WEEK.

We would remind those correspondents who so frequently write "private" or "confidential" letters, approving or condemning the course of the Medical Times on various questions, that it is their duty to put their opinions in proper form for publication, and give them to the profession. A portion of this Journal is especially devoted to the discussion of miscellaneous medical subjects, current topics, etc., and it is the duty of every one who desires to advance his profession to contribute his influence through this channel. We are always grateful for advice honestly given as to the course this Journal should pursue, but we would much prefer that every medical man should advocate his own views. To give the greatest possible inducement to persons who do not wish to have their names appear in connexion with special subjects, we are willing to withhold the names.

We have noticed the fact that the Enrolling Surgeons, with many honorable exceptions, were mere political doctors, and totally unfit for their position. The evidences of their incapacity begin to appear as the conscripts gather at their rendezvous. From authentic sources we learn that the most obvious diseases are passed over without notice. At Riker's Island, the rendezvous for the eastern part of the State of New York, are men suffering from cardiac diseases, amaurosis, etc. It is stated that an order has been issued requiring the examination of these surgeons, as to their professional qualifications, by a surgeon of the regular army. We earnestly hope this is the case, and that this examination will be most thorough, otherwise the regiments in the field will be recruited with men who will go at once to the hospitals.

We learn that the Surgeon-General proposes to organize a reserve medical corps, and has invited the Governors of the States to make the selections, thirty being allowed to each State. When called into service they are to remain at least fifteen days, and are to receive pay at the rate of $100 per month. The plan is an excellent one, and destined to save a vast amount of suffering. We fear the pay is not such as to command the services of the very best men, but we hope they will be selected in each State. During the Crimean war the English authorities sent out a number of eminent civil surgeons, giving them the pay, we believe, of regimental surgeons, and continuing their pay for six months after their return, in order to remunerate them for loss of time and business. This reserve corps should be deemed most honorable by the profession at large, and every means be taken to make it effective.

Reviews.

Clinical Lectures on Diseases of Women. By J. H. Simpson, M.D., F.R.S.E. Illustrated with One Hundred and Two Engravings on Wood. Philadelphia: Blanchard and Lea. 1863. Pp. 510.

The Lectures comprised in this volume first made their appearance in a London contemporary. The high reputation of the author, and the intrinsic importance of the subjects discussed, combined to render them very attractive to the medical reader. It is not too much to say that no European obstetrical writer is so much respected in this country as Professor Simpson. One of the most attractive features of his writings to an American physician is the thoroughly practical manner in which he treats each subject. Every point is elucidated with all the light which ancient or modern medicine can throw upon it, and the practical deductions are of rational application.

The work consists of thirty-eight lectures, embracing the principal disorders of the uterine organs. It does not lay claim to the character of a complete treatise on the diseases of females, but consists rather of a selection of subjects from this department of obstetrics. The volume opens with two chapters on vesico-vaginal fistulas. Professor Simpson prefers the iron to the silver wire on account of its efficiency and cheapness. He has also added several instruments to those employed by Sims and Bozeman in the treatment of this accident, as the hollow needle, splint of wire, etc. These improvements, to which the author evidently attaches much importance, have not met with favor by those familiar with the operation.

In the four following chapters the subject of cancer of the uterus and mammæ is thoroughly considered. The author advocates the use of caustics in the treatment of this disease, and his own large experience furnishes unequivocal evidence in favor of these remedies. The caustic which he prefers is the dry or anhydrous sulphate of zinc made into a paste with strong sulphuric acid.

Two lectures are devoted to dysmenorrhœa and its treatment, and three to the various affections of the external genitals. Surgical fever is the subject of three lectures. Prof. Simpson takes occasion, on introducing this latter subject, to rebuke surgeons for devoting so much thought and study to operations, and so little to the after-treatment of patients. The censure has, however, we believe, a limited application, and may be applied with equal force to obstetricians. The term Surgical Fever is inaptly chosen, when considered in the light of modern pathology. Fever is not a disease, but a symptom, and an inconsiderable one, of the textural changes that are taking place. If the practitioner regards the fever as the disease, as he is always liable to, he will most certainly overlook the general and local disease of which the fever is a symptom. If this form of fever is the result of blood-poison, it is better to call it toxæmia; or if it is due to coagula of blood deposited in one or more organs of the body, let it be called embolism, or be designated by some term that more nearly defines its proximate cause, than the obsolete word fever. This subject is one of great interest, and is treated by Prof. Simpson with his usual learning and ability. Passing over the three following lectures occupied with phlegmasia dolens, and the diseases of the coccyx, we have pelvic cellulitis treated of very fully. It is but recently, comparatively, that this obscure disease has been investigated, and Prof. Simpson has given the most satisfactory account of it that we have yet read. We must urge every student of uterine pathology to a careful perusal of these two lectures. Ovarian diseases and their treatment are discussed at length, and very elaborately. The author brings to bear upon this subject all his knowledge and experience, and the lectures devoted to the subject form a very complete monograph. Prof. Simpson is a rational advocate of ovariotomy, and the array of evidence which he brings forward to sustain his position must convince every unprejudiced mind.

The remaining eight lectures are devoted to subjects not less important than those already mentioned, but our space does not allow us even to enumerate them. In closing this volume we cannot forbear to express the most unequivocal opinion in favor of the work. Though the subjects selected are not numerous, they are all important to the practitioner, and are rich in practical facts.

Correspondence.

CALOMEL AND TARTAR EMETIC IN THE ARMY.

[To the Editor of the American Medical Times.]

Sir:—Participating in that national sensibility which causes Americans to shrink from the touch of anything that may tarnish our national escutcheon, I was wounded by the circular of the Surgeon-General, dated May 4, 1863, which directed calomel and tartar emetic to be "struck" from the Medical Supply Table of the army; and this the more deeply, because, from the official eminence of its source, it might be regarded on the other hemisphere as a proof of our professional retrogression. When contemplated from another point of view, whence it may be looked at as an evidence of our individual and national imbecility, as shown in the readiness with which we bend to every breeze of fanaticism, whether freighted with medical or political heresy, it is then sufficiently humiliating, and should be met with a rebuke from every conservative member of the profession.

The efforts of the American Medical Times to justify this act, and to sustain and sanctify this error by its influence over its readers, have induced me to make this reply, not more to the circular than to the remarks of its editor in vindication of it.

I can find excuses for the action of this officer in the fact that he has seen but little of military service, and knows but little from personal observation of the diseases of soldiers; and also in the influence imputed to the National Sanitary Commission over the Chief of the Medical Bureau, to the head of which commission, he being clothed with a sacerdotal pallium, we may, perhaps, justly impute a full share in the introduction of this species of medical fanaticism into the army of the United States.

For the gentleman who made a speech in defence of the circular before the *American Medical Association* at Chicago, an apology may be framed on the supposition that it was for his interest to do so. The official relation of the parties renders such a supposition quite probable, and would, in other courts, impeach his testimony.

Whilst in my own mind I can satisfactorily account for the action of the Surgeon-General, and apologize for the indiscretion of his friend in the Medical Association, I am entirely at a loss for an explanation of the course pursued by the editor of the American Medical Times, in bringing the influence of a journal heretofore aiming to be the exponent of the medical opinion of the country to the defence of an act offensive to that profession and insulting to the medical staff of the army. One reason given by the Surgeon-General for the erasure of calomel and tartar emetic from the army medical Supply Table, viz. that it was done in consequence of the teachings of "modern pathology," may deceive the readers of "Physiological Essays," but cannot mislead the students of historic medicine, who know how much therapeutics are indebted to empiricism, in its ancient signification, for the introduction of many important articles into the materia medica prior to the time of Galen, and who are also aware that the usages of that sect who tested the utility of remedies by experimentation still furnish the means by which judgments are formed of their claims to a position in our works on therapeutics.

The other reason, judging from its position the first in importance in the estimation of the Surgeon-General, rests upon reports of the Sanitary Inspectors, who have assumed that certain forms of humid gangrene seen among the troops in the United States service are the effects of the administration of mercury; and from thence the conclusion is arrived at, that the evils consequent upon its use more than counterbalance the good to be attained by its further toleration as a remedy, wherefore it is "struck" from the Supply Table of the medical department of the army. That neither of the parties advocating the enforcement of the order excluding calomel from the army hospitals should have uttered a doubt as to the nature or the cause of the gangrene alluded to, is a painfully significant fact, showing either ignorance of the medical history of the country or a disposition to stifle its teaching.

If the facts assumed by the Surgeon-General to be true are not to be called in question, they only prove what all right-minded people admit, the predominance of evil in this world everywhere. All intelligent members of the medical profession know that the mischiefs done in the name of medicine outweigh the good it has accomplished. And what we admit to be true of medicine, we believe to be also true of law and divinity; but no sane person would on that account for one moment think that doctors, lawyers, and clergymen, should be expelled from civil society, any more than intelligent practical physicians would advocate the expunction of the name of a medicinal agent of recognised utility from the supply table of a hospital, because it had been converted in the hands of ignorance into an instrument of destruction.

A very important question, pertinent to this discussion, seems not to have been asked, but if so, has not been answered; and that is—Have the cases of gangrene reported to the Medical Bureau been caused by the use of mercury, or the insalubrity of the season, or of the particular locality where they have occurred!

More than thirty years ago, whilst on duty at a military outpost, I had opportunities of seeing cases of humid gangrene, such as have been described under the names of gangrenous erosion of the cheeks, gangrenopsis, and by that acutest of observers, the late Dr. Parrish, of Philadelphia, as a "disease resembling the effects of mercury." This disease was recognised as the product of malaria, and was especially familiar to the physicians residing at Natchez on the Mississippi. Cases of this kind occurred in 1836 and 1839 as far north as Detroit; since when, owing to a notable change in the diathesis of epidemic disease, none have been seen of which I have any knowledge north of the Ohio river. So far from having been caused by the misuse of calomel, it was most successfully treated by heroic doses of this ostracised article.

I think it now quite reasonable to suppose that the approach of a similar morbid cycle co-operating with the exposures of a hazardous service may have brought back the long lost cases of gangrenous erosion of the cheek. One reason for such a belief is derived from the condition of the sick found in the hospitals at Evansville, Ind., Paducah, Ken., Mound City and Cairo, Ill., and Memphis, Tennessee, where I saw in February last instead of the destructive marks of excessive mercurialization, what I considered evidences of too cautious a use of mercurials in the early stages of the diarrhœas associated with or dependent upon hepatic torpor.

Yours, etc.,

Z. P.

Detroit, July, 1863.

VERATRUM VIRIDE IN DIAGNOSIS,

AND AS A SUBSTITUTE FOR TARTAR EMETIC.

[To the Editor of the American Medical Times.]

Sir:—Permit me briefly to attest my sense of the very considerable value in diagnosis of veratrum viride, and especially so in the disease of the heart. For the purpose for which Prof. Percy proposes it, namely, to abate the comparative tumultuous relations of the different audible signs in disease of the heart, it seems indeed a very valuable means of sensibly diminishing the difficulties of a correct diagnosis. It seems, indeed, evident without the test of experiment which it has stood in his hands, that, in such cases, though a comparatively *gross* diagnosis may readily be made out without such means, yet a nicer analysis, and hence a more perfectly correct one, can only be made out where the nearly simultaneous occurrence of the different audible elements can be sensibly prolonged by *slackening* the rate of their occurrence. Thus, for example, if there happen to be regurgitation at either of the orifices of exit from insufficiency of the valves, while at the same time the valves themselves were in a strictly pathological state, the slowing of the motion of the heart would diminish to the minimum one *condition* of difficulty in the diagnosis, not indeed by actually repeating by an interval of time the two sets of signs, but by so *prolonging* both as to enable the observer to appreciate them more *sensibly* and certainly than when they occurred at a much more rapid rate.

Of course, apart from the veratrum, our present means of observation in enlargement, etc., of the heart, are quite adequate to a correct diagnosis; but in other cases it cannot fail to be of very positive service. A certain interval of time, during which the phenomenon takes place, is wholly indispensable to a *sensible* appreciation of its character. In studying visually the motions of the heart—in seeking to find, appreciably to a sensible analysis, the change of its form and other incidents of its motion—every experimental physiologist knows that his study is most successful when the rate of motion is *slowest.* Precisely the same is true of any analysis by the other senses, as the ear, or taste, etc. etc.

It is this view, that I trust no practitioner who has the opportunity will fail to try the veratrum.

It is common to say that the veratrum is an *unsafe* remedy, but in much use of it *throughout* no inconsiderable experience as a surgeon of volunteers, as a substitute for tartar emetic, I have never had occasion to *feel* that it was unsafe. And here it seems evident to me that the exclusion of *tartar emetic* from the army supply table was a *sound* act of the Surgeon-General, U.S.A., though I should have preferred, as no doubt he also would have preferred, that army surgeons had, without official ordinance, foregone the use of the proscribed article, in favor of others equally efficacious, and far less liable to prove injurious. Such is the case with veratrum.

Respectfully, your obed't serv't,
Rufus King Browne, M.D.

VERATRUM VIRIDE

IN DIAGNOSIS OF DISEASES OF THE HEART.

[To the Editor of the American Medical Times.]

Sir:—In No. ii., p. 18, of your present volume, you call attention to a lecture by Professor Percy in the same number, and ask for criticisms on the new method there proposed for arriving at a correct diagnosis in diseases of the chest.

Feeling that you are but too just in your remarks (on the same page) on the indolence of the profession, I have ventured to add my mite to the literature, although it is a new occupation to me. Perhaps you are right in your remarks as to the indolence of the profession *in general;* but from my own observations I believe, if you will look more closely into the matter, you will find that the "indolence" is confined chiefly to the older members—that the younger members study diligently the medical literature, and are only too happy to read the well digested experience of their seniors. But, Sir, our seniors have all the hospital appointments, and almost every place of emolument or trust is filled by the older members of the profession—but in what journal can we juniors read the results of the treatment of the patients in the New York or Bellevue Hospitals?

For modesty's sake the junior members of the profession cannot write—for want of experience they should not write. But these objections will not apply to many of the older members, who are receiving the cream of both public and private practice, and are daily robbing their profession of the results of these great opportunities. There are many of these older members of our profession enjoying the privilege of a lucrative practice, who excuse themselves from giving their juniors the results of their experience because they assert they have not time. This is but a poor excuse, for out of their large income they could well afford to pay some younger brother for an hour's service as amanuensis daily.

But to return to my subject. Some months ago I heard Dr. Percy's remarks on the use of veratrum viride and other remedies as a means of diagnosis in diseases of the chest, and as I have given particular attention to the study of auscultation and percussion, I immediately put his method in practice, and was more than pleased. I was highly gratified with the great assistance this new suggestion gave to the auscultator. To one commencing the study of the abnormal sounds caused by diseased action of the heart and lungs, the previous preparation of the patient, as suggested by Dr. Percy, is of very great value, as by this means he can learn more in one examination than he would in twelve without it. To one who has made auscultation a close study, abnormal sounds are readily distinguished, but even with the most practised ear it is often exceedingly difficult to separate functional disturbance from organic lesion. The respirations are often very numerous, the heart's pulsations exceedingly fast; and, as Dr. Percy says, it is often almost impossible to arrive at any clear diagnosis, owing to the great amount of functional disturbance which masks the sounds given by organic disease. By this new treatment the respirations and pulsations are reduced in frequency, the functional disturbances are removed, and then "the mind can readily define and arrange the sounds that are communicated to the ear."

This "new means of diagnosis" does great credit to Dr. Percy, and is another evidence of his industry and research. As an individual I am deeply indebted to him for the suggestion.

The observations made in the latter part of Dr. Percy's lecture fully correspond with my own experience. I have found the tincture of veratrum viride in the drug stores perfectly unreliable. That made by Dr. Percy's prescription I have used in more than twenty cases, and found it uniform in its action.

By reference to a previous number of the Medical Times I see that Dr. Percy read an essay at the *American Medical Association* on the subject of veratrum viride, for which he received the prize. Can you tell me where a copy of the Transactions of the Association are to be obtained?

Quæritur.

[The volume of Transactions containing the Prize Essay is not yet published.—Ed.]

TREATMENT OF CONTINUED FEVERS.

[To the Editor of the American Medical Times.]

Sir:—Having read with considerable interest the report of the discussion on the treatment of continued fevers before the New York County Medical Society, more especially that portion relating to the administration of stimulants, and seeing no mention of the sesqui-carbonate of ammonia—an agent that has proved itself quite worthy at my hand—I venture a word:—Of between forty or fifty cases that came under my care in the fall of 1862, with one or two exceptions, it was the only stimulant employed, and of the number only one died, a widow lady, aged 65, which, I think, will compare quite favorably with the result of alcoholic stimulants, without any of the deleterious effects of the latter.

Most of the cases were very wild and delirious, thus evincing an excited state of the brain, and the fact of the sesqui-carbonate of ammonia possessing "power of increasing the action of the heart and arteries, without unduly exciting the brain," together with its diaphoretic properties, induced me to give it a trial, which I never have had cause to regret.

I wish also to allude to my mode of treating typhus and typhoid fevers in this connexion. When called at the outset of the attack I usually administered a few grains of the hydrargyrum cum creta, or pilulæ hydrargyri, followed in four or five hours by some eccoprotic remedy. If the patient is restless I give pulv. Doveri, and endeavor to equalize the circulation by means of sinapisms to feet and cold applications to head. I order the patient to be bathed every morning, and if the fever is very high, oftener. The room is to be kept well ventilated, and as near 65° of temperature as possible, together with a low regimen. On the second or third day I commence the administration of quinine, and give some gentle aperient to secure a movement of the bowels each day. As prostration becomes manifest I increase the quinine, and alternate it with the sesqui-carbonate of ammonia; bowels, if necessary, to be moved by injections; beef-tea *ad libitum;* patient to be sponged in place of bathed, and closely watched. For tympanitis, I administer spts. turpentine in some mucilage. For the Peyerian lesion, also prescribed same remedy, with marked benefit; and in one instance an excessive amount of blood was passed by the bowels, for which no other agent was used, but yielded to a few doses. In two or three instances, in which the vitality was very low, combined wine whey as a nutrient and stimulant, which was the exception above referred to.

W. A. W.

DECOLORATION OF TINCTURE OF IODINE.

[To the Editor of the American Medical Times.]

"The Decoloration of Tincture of Iodine by the Urine.—This property, lately discovered by M. Trousseau, is now attracting considerable attention at Paris, and numerous experiments are being performed, not only upon human urine, but upon that of animals. In the *Gaz. Hebd.* of May 15th, experiments are described which were made upon the carnivora in the Paris Zoological Gardens. From these and other experiments upon herbivora it has been found that the decoloration is very strong with the urine of carnivora, but quite absent when the tincture of iodine is tried with the urine of herbivora. In the case of the carnivora even alkaline urine effected the decoloration."

SIR:—The above is taken from the *London Lancet* of June 13th. It will be observed that it is claimed that M. Trousseau has made the discovery that iodine is deprived of its color by human urine. By referring to the AMERICAN MEDICAL TIMES of March 1, 1862, in my lecture upon iodine, after giving the various methods for detecting iodine in the urine, the following language is used: "but, as the urine itself has the property of decolorizing iodine," etc. Again, in my lecture of March 8, 1862, the following language is used: "The saliva, the nasal and pulmonary mucus, the blood, and the urine, when added to small quantities of iodide of starch, completely deprive it of color; the same decolorization also takes place if applied over an ulcer, and the sweat produces the same result." Dalton makes the same observation with regard to the gastric juice, and, if my memory does not betray me, he makes the same remark regarding the urine as the results of his experiments, as I, in the instances here mentioned, state as the results of my experiments. I do not deny the industry of our French medical brethren; I merely mean to assert, as I have so frequently done, that we are not behind them either in industry or invention. I must confess, Mr. Editor, that I have been not a little astonished to see how eagerly many of our medical journals seize upon discoveries or novelties that they receive from abroad, and neglect even to notice important discoveries made at home. We do not receive any too great praise abroad; it therefore behoves us to be watchful of what rightfully belongs to us. There is no novelty whatever in the facts stated by M. Trousseau; chemists have been for some time aware of them, and, as will be seen by reference to my lectures in your Journal, we have taught it to our students of materia medica.

I am, sir, yours truly,
SAML. R. PERCY, M.D.

Army Medical Intelligence.

SPECIAL ORDERS, No. 281.

WAR DEPARTMENT, ADJ. GEN'L'S OFFICE,
WASHINGTON, June 25, 1863.

1. Leave of absence is granted the following named Officers on Surgeon's certificate of disability.

Assistant-Surgeon D. C. Spencer, 44th New York Vols., for twenty days.

12. Leave of absence is hereby granted to Medical Inspector G. W. Stipp, U.S.A., for the benefit of his health.

By order of the Secretary of War,
E. D. TOWNSEND,
Asst. Adjutant-General.

SPECIAL ORDERS, No. 277.

WAR DEPARTMENT, ADJ. GEN'L'S OFFICE,
WASHINGTON, June 23, 1863.

7. Surgeon W. H. Morton, 1st Minnesota Vols., having tendered his resignation, is hereby honorably discharged the service of the United States.

By order of the Secretary of War,
E. D. TOWNSEND,
Asst. Adjutant-General.

(CIRCULAR NO. 8.)

SURGEON-GENERAL'S OFFICE,
WASHINGTON CITY, D. C., June 22, 1863.

I. It is provided, by act of Congress, that soldiers discharged from the Army of the United States *within two years* from the day of their enlistment *by reason of wounds received in battle*, shall be entitled to receive the same bounty as is granted to those discharged *after two* years' service.

Medical Officers are accordingly directed, in making out the papers of soldiers discharged under such circumstances, to endorse upon both the Final Statements and the Discharge the fact that the disability is by reason of wounds received in battle, and to sign such endorsement with their official signature.

II. Hereafter in giving Discharges to officers and soldiers on account of disability, their discharge papers must always state whether, at the time of discharge, the officer or soldier was or was not physically suitable to enter or re-enlist in the Invalid Corps.

III. From and after the 30th instant, the envelopes of all official communications addressed to the heads of bureaux of the War Department having the franking privilege, must be marked "Official," with the signature thereto of the officer writing the communication. Postage stamps are not required on such communications.

WM. A. HAMMOND,
Surgeon-General.

(CIRCULAR NO. 10.)

SURGEON-GENERAL'S OFFICE,
WASHINGTON CITY, D. C., July 15, 1863.

Surgeons in charge of U.S. Hospitals will forward to this Office, without delay, rolls of all Prisoners of War now inmates of their hospitals, or who may be hereafter received as such.

These rolls will contain the names, rank, company, and regiment of the prisoners, and the time and place of their capture.

WM. A. HAMMOND,
Surgeon-General.

ORDERS, CHANGES, &c.

Surgeon C. N. Chamberlain, U.S.V., has been ordered to take charge of the hospital of the 6th Army Corps, at Gettysburg, Penn.

Surgeon Henry Janes, U.S.V., is in charge of all the hospitals in and around Gettysburg, Penn.

Surgeon George Suckley, U.S.V., has been relieved from duty as Medical Director of the 11th Army Corps by Surgeon C. F. H. Campbell, U.S.V., late Medical Director of Kelly's command, at Harper's Ferry, and has reported to General Schenck, at Baltimore, Md., by whom he has been assigned to duty as Medical Director, U.S. Troops, in and around Baltimore, Md., relieving Surgeon C. W. Jones, U.S.V., who remains in charge of General Hospital at Newton University, Baltimore, Md.

Surgeon George H. Hubbard, U.S.V., Medical Director of South-Western Missouri, is absent, on leave, at Manchester, N. H.

The resignations of Surgeons Henry Bryant and R. H. Wevill have been accepted by the President, to date July 16, 1863. Both those gentlemen resign on account of ill health.

Surgeon D. W. Hand, U.S.V., has reported to the Medical Director at Fort Monroe, Va., on return from leave of absence.

Assistant-Surgeon Quie, 84th New York Vols., has relieved Surgeon C. F. M. Neilson, 6th Maryland Vols., in the duty of attending the sick of detachment, 45th Massachusetts Vols., stationed near Camp Bradford, Md.

Mr. Robinson, of Baltimore, having offered the use of the house No. 19, Camden st., Baltimore, to the men of Massachusetts regiments whose terms of service have expired, Surgeon Hasson, of the National Hotel Hospital, has been ordered to provide the necessary medical attendance, and take the building under his sanitary control, issuing such articles as may be necessary for their comfort.

Acting Assistant-Surgeon E. E. Atkinson, U.S.A., has been assigned to duty at Newton University Hospital, Baltimore, Md.

By S. O. 186, Department of the Tennessee, Surgeon John Moore, U.S.A., has relieved Surgeon Madison Mills, U.S.A., as Medical Director of that Department. Surgeon Mills is awaiting orders at St. Louis, Mo.

Surgeon Bernard Benst, late in charge of General Hospital, Harper's Ferry, Md., has been assigned to duty in charge of the hospital, 11th Army Corps.

Surgeon D. J. McKibbin, U.S.V., is on duty at General Hospital, at Tullahoma, Tenn.

Surgeon W. S. Forbes, U.S.V., has been relieved as Medical Director, 13th Army Corps, by Surgeon George Hammond, U.S.A., and assigned to the charge of the hospital of that Corps, near Vicksburg, Miss.

Surgeon S. D. Carpenter, U.S.V., has been relieved from duty on the Hospital Transport "Continental," and assigned to the District of the Border as Medical Director.

Surgeon D. G. Brinton, U.S.V., has been appointed Surgeon-in-Chief, 2d Division, 11th Army Corps, Army of the Potomac.

Surgeon P. A. O'Connell, U.S.V., has been assigned to duty at Indianapolis, Ind., as Medical Inspector of the District of Indiana and Michigan.

Surgeon Francis Bacon, U.S.V., has been assigned to duty in charge of the St. Louis General Hospital, New Orleans, La.

Surgeon J. W. Lawton, U.S.V., has been placed in temporary charge of the General Hospital at Gallipolis, O.

Surgeon John H. Sullivan, U.S.V., is in charge of General Hospital near Camp Curtin, Harrisburg, Penn.

Surgeon J. D. Strawbridge, U.S.V., is on a tour through the General Hospitals and Convalescent Camps at Milliken's Bend and Young's Point, La., for the purpose of examining and giving certificates of disability in all such cases as he may deem necessary.

Surgeon J. G. F. Holston, U.S.V., has reported to General Asboth, at Columbus, Ky., for duty.

Acting Assistant-Surgeon Elliott, U.S.A., has reported for duty at Annapolis Junction, Md.

Assistant-Surgeon C. W. Moore, 13th Pennsylvania Cavalry, has been assigned to temporary duty at West's Buildings Hospital, Baltimore, Md.

Assistant-Surgeons J. B. Bellangee, Philip Hawey, A. M. Wilder, J. B. Morrison, S. J. W. Mintzer, J. W. Lawton, L. W. Read, and John L Teed, have been promoted Surgeons of Volunteers.

Drs. J. K. Baudny and W. B. Trull, Acting Assistant-Surgeons, U.S.A., G. McC. Miller, of Delaware, and J. H. Sullivan, of New York, have been appointed Assistant-Surgeons of Volunteers.

Surgeon David P. Smith, U.S.V., has returned from temporary duty with the Army of the Potomac, and resumed charge of the General Hospital at Fairfax Seminary, Va.

The Medical Director's (Surgeon Buckmaster) Office of the District of the Frontier, has been removed from Fort Leavenworth to Fort Scott, Kan.

Surgeon J. J. De Lamater, U.S.V., in addition to his duties as Chief-Surgeon of Contrabands at Newbern, N. C., has assumed the duties of Chief Medical Officer of General Weld's Brigade.

Surgeon A. B. Hasson, U.S.A., has been relieved from duty in charge of the General Hospital, Camden street, Baltimore, Md.

Surgeon J. B. Bellangee has been assigned to duty at the Stanley Hospital, Newbern, N. C.

Original Lectures.

DISEASES OF THE RESPIRATORY ORGANS IN CHILDREN.

BEING A COURSE OF LECTURES PREPARED FOR DELIVERY DURING THE SPRING SESSION OF 1862 IN THE COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.

BY THE LATE
C. VAN ALEN ANDERSON, M.D.,
PHYSICIAN TO CHILDREN'S DEPARTMENT, DEMILT DISPENSARY, N. Y.

LECTURE V.—PART I.

DIPHTHERIA, ITS PATHOLOGY AND TREATMENT.

Gentlemen:—The interest attached to the diphtheritic form of croup would justify me in occupying more of your time in its description, were I not aware that you have recently listened to a masterly series of remarks upon it by Dr. Clark. I cannot pretend to bring so vividly before you the various phenomena connected with its progress and termination; yet I trust that the variety of subjects which have engaged your attention during the winter course, will furnish me with a sufficient excuse for saying a very few words upon its leading characteristics.

It seems to me that diphtheria is a blood disease, just as much as typhoid fever is. The condition of the pulse, the pallor of the skin, the rapid prostration, and the fact that the pseudo-membranous effusion is not confined to mucous surfaces, but is also discovered on the denuded cuticle, all point to this conclusion. But it is a disease marked by the deposition of false membrane; and the presence of this morbid secretion in the air-passages—in other words, the diphtheritic form of croup—is what we are called upon at present to consider.

It commences either very mildly, or else with well pronounced symptoms. In the former case, at the beginning there is slight sore-throat, hardly any fever, and the appetite and strength are retained. In other instances the fever is decided, with aching of the limbs, general uneasiness, heat of the surface, and thirst; but before long there is a degree of dysphagia—the child complains somewhat of trouble in swallowing, especially substances which are of small bulk. Pain in the pharynx is also a symptom which is observed in the majority of cases, but which is not invariably present. In some of Bretonneau's cases it was very considerable, and accompanied with a sense of heat and local soreness; in others it was entirely wanting, and making its appearance at any stage of the disorder. A change in the sound of the voice is very common—usually the child is hoarse, and can do no more than whisper; or else its articulation has a peculiarly obscure and nasal character. There is almost always a slight hawking kind of cough. Being led by these symptoms to inspect the condition of the throat, we discover at first some redness of the pharynx, uvula, and pillars of the fauces, which phenomena are soon followed by others more distinctive and characteristic. One or both tonsils become tumefied—Bretonneau says much more frequently one than both—and some white or yellowish-white spots are seen on the surface of the swollen organ. "These spots, which are more or less numerous, are due to the production of a pellicular, lichenoid exudation, which falls off spontaneously, and is very easily detached. There is considerable enlargement of the lymphatic glands of the sides of the neck. From the beginning this enlargement is marked by its disproportion with the extent and intensity of the inflammation of the mucous surfaces; the deglutition is not very painful, and it becomes less and less so; the tumefaction of the tonsil, which has been first affected, augments; a redness of a very variable tint circumscribes the exudation, which is sometimes rapidly extended to the velum palati, the uvula, the pharynx, and the tonsil of the opposite side."* This terse description of Bretonneau's admirably paints the condition of the parts about the throat in the early period of the disorder. The patch of false membrane on the tonsil spreads gradually over the neighboring parts, and increases likewise in thickness; it finally lines the pharynx, then invades the air passages, seizes on the larynx, and gives rise to croup.

The nature of this diphtheritic membrane has been carefully studied by some French physicians. They consider that its evolution may be divided into three periods, viz. 1st. The period of development; 2d. The period of complete formation; and 3d. The period of decline. The membrane begins to be developed by the effusion of a sero-mucous, transparent, and ropy liquid, which covers the affected part. It is difficult to discover both on account of the deeply seated organs upon which it appears, and also on account of the rapidity with which it changes its character in order to assume that of false membrane. At various portions of its surface there are quickly seen little spots, less transparent, assuming a yellowish tint, which, though at first isolated from each other, and imperfectly circumscribed by the fluid in which they are formed, soon unite and coalesce with one another. By this kind of coagulation—if I may use the word—a very delicate and slightly adhesive substance is created, which is, in fact, the false membrane in the first stage of its formation.

At the period of maturity the deep surface of this rudimentary membrane is still bathed by the serous matter which continues to be effused from the disordered mucous membrane. This serous fluid, lying between the mucous tissue and the false membrane, gradually becomes incorporated with the latter, increasing its thickness and density. By these means, there is formed in a short time a concretion of a yellowish color, with an appreciable thickness, considerable cohesive power, and strong attachment to the underlying parts. It is at this point impossible to remove it without producing bleeding from the superficial vessels, the membrane being closely adherent to the vascular tissues. In certain cases, when thus matured, it seems only to extend over the surrounding parts by degrees, and is limited by a rose-red border; in others one layer is continually produced below another which it raises, and is raised again itself in turn by a third, so that there is finally a stratified arrangement of the whole concretion; while in others the false membrane is soaked and softened in the serous fluid, putrefies, assuming a greyish or blackish color, and exhaling an exceedingly fetid odor.

When the diphtheritic pseudo-membrane has acquired its entire development, the period of decline begins. It ceases to spread, and preserves its appearance unchanged for a season of very variable duration, with the exception that it becomes thickened at its edges. A process of resorption then takes place; it becomes less adherent at its outer border; its diameter gradually contracts, the points last formed being the first to disappear. It never vanishes all at once, like an eschar, leaving behind it a cicatrized surface, but, on the contrary, undergoes a continuous physiological action, being removed by the absorbents of the part which it has covered. I need not detail to you the phenomena produced by the presence of this false membrane in the larynx, because they are essentially the same as those of true croup. The general symptoms are more typhoid in character, the cough is perhaps not so brassy, and the spasmodic condition less marked; but you will readily recognise the disease by its peculiar signs, and will be in no danger of mistaking it for cynanche trachealis. In fact, should you confound the preliminary stages of the two affections, which is a difficult thing to do, an inspection of the fauces will reveal to you the true nature of the complaint, for you do not have in croup the yellowish membranous patch of diphtheria.

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* Bretonneau's Third Memoir.

The pathognomonic symptoms of croup are the hoarse voice, the brassy cough, and the hissing inspiration, accompanied throughout their course by more or less fever. This combination you will find in no other disease; yet there are several which are often confounded with it, in spite of phenomena which are equally peculiar to them, and equally distinct in their manifestation.

I.—Croup may be confounded with a disease to which I am going soon to ask your attention, called spasm of the glottis; but you will learn that the latter is entirely convulsive in its nature, sudden in its access, unaccompanied by cough, wanting the inflammatory symptoms of croup, and differing greatly in its post-mortem appearances.

II.—Croup may be confounded with simple laryngitis; but laryngitis is so extremely rare in children that I should doubt whether any of you will ever see an instance of it before puberty. The voice and cough are rough and hoarse, but have not the metallic sound which is heard in cynanche trachealis. There are fever and expectoration, but no such paroxysms of dyspnœa as I have just described to you in detailing the symptoms of croup.

III.—Croup ought not to be mistaken for diphtheria, or diphtheria for croup. The preliminary stage of the two diseases is different, one being generally sthenic, and the other asthenic. Moreover, diphtheria is supposed to be contagious in its nature, while croup, though frequently epidemic, is never contagious.

IV.—The symptoms excited by the presence of foreign bodies in the trachea closely simulate those of croup, but a careful inquiry into the history of the case, and the manifest absence of inflammatory pyrexia, will make your diagnosis clear.

V.—Lastly, I trust that none of you will mistake hooping-cough for croup, as has sometimes been done. The signs of the two diseases are so entirely distinct—as you will discover when we come to the consideration of pertussis—that at present I need say nothing more about it.

The diagnosis of cynanche trachealis in all cases is doubtful, and in the majority bad. Although the probabilities are against recovery, in estimating these we must accept as elements of our calculation the complications and extent of the disease, the period at which the child comes under treatment, the intensity of the symptoms, the degree of fever, and the strength of the constitution. In a case of uncomplicated croup, particularly if the symptoms be nervous rather than inflammatory, I believe that we may hope by prompt and timely measures to save our patient; if bronchitis supervene, the chances of recovery are greatly diminished; if it advance to pneumonia, they are very slight indeed. Diphtheritic croup, as you know, is one of our most rapidly fatal disorders, and the instances from recovery from the croup that complicates measles and scarlatina are few and far between.

The treatment of cynanche trachealis is what the treatment of all disorders beyond the power of medicine is—traditional in its nature, uncertain in its character, varying not only from age to age, and from one period to another, but changing also with each individual who encounters the complaint. We all admit, as we do in the treatment of typhoid fever, that our remedies are utterly incompetent to meet and baffle the disease, but the cause of death seems so mechanical, and so easy to overcome, that every one of us, undeterred by the failure of his predecessors, advances full of confidence in some new agent which we have discovered, and which in our eyes—but unfortunately only in our eyes—justifies by its success the trust that we place in it. The history of the treatment of croup is therefore in most cases the history of means that have been tried, and have failed. Yet there are certain indications of cure that demand that our efforts should be directed to the attainment of particular ends. These indications are, 1st. In the early stage to modify the inflammatory action, and to prevent the accumulation of the pseudo-membrane in the air passages. 2d. When we cannot do this, to try and bring about the dislodgment of the albuminous concretion. 3d. To mitigate the spasmodic elements of the disorder. 4th. To support the powers of life in the latter stages, so as to enable the system to rally from the disease.

To effect these objects various plans of treatment have been proposed by different physicians. Dr. Watson says that "the three remedies that most require consideration, are blood-letting, tartarized antimony, and calomel." He advises the abstraction of blood by venesection or cupping in older children, and by leeches in younger ones, particularly if the patient be strong and plethoric, and seen at the outset of the disease. The bleeding is to be followed up by the administration of tartar emetic in doses sufficient to vomit; because he regards that drug as having great power over the inflammation of mucous tissues, and because children may readily be induced to take it from its almost tasteless character. Frequent emesis, he thinks, sometimes puts off the disease; but if no ground be gained after two or three repetitions of the emetic treatment, it is to be abandoned, and the administration of calomel resorted to.

Dr. West insists particularly on the necessity of treatment in the very earliest stage of the disease. Even in cases where the attack is merely apprehended, the child is at once to be placed in a warm bath, be confined to bed and a light diet, and brought under the influence of an emetic of antimony and ipecacuanha, to be followed by a mild saline aperient. But a more energetic plan is to be followed if the symptoms attain their full development before the patient is brought to your notice. Large bleedings and the free administration of tartar emetic are the means which he uses; and if after one free evacuation of blood, and the administration of antimony for five or six hours, the croupal symptoms are not ameliorated, local depletion, and in some cases another venesection, are demanded; while, if the disease yield to the depletion and the antimony, they are discontinued, and calomel is given in sufficient doses. But the third stage, Dr. West thinks, should be treated in a totally different manner. The child is to be aroused from the state of collapse into which it begins to sink by a hot mustard-bath, the antimony is to be stopped, emetics of the sulphate of copper are to be used, as a mixture of decoction of senega, carbonate of ammonia, and tincture of squills. He prefers the sulphate of copper, because it is an emetic of great power, and perhaps prevents the accumulation of false membrane in the larynx; while the senega, ammonia, and squills, form a valuable stimulating expectorant. Dr. Churchill advises a plan of treatment, which in its general features is the same as Dr. West's. Our success, in his opinion, depends upon seeing the child early—at the very beginning of the attack if possible. An emetic of ipecacuanha or of antimony is to be given at once, and nausea is to be kept up for some time. If this fails in changing the character of the disease, then we are "to take as much blood as will make a decided impression, and to repeat the bleeding if necessary." In the second stage we are to rely on the same remedies, especially if they have not been before used; though we are to remember that tartar emetic sometimes has a very depressing effect, utter and irrevocable prostration, and death, having resulted from its employment; in such cases squills or ipecac may be substituted for it. Calomel is also to be administered, though not to the exclusion of the emetic; the mercurial influence may be obtained by the inunction of ung. hydrargyri; and the action of an occasional brisk, warm cathartic will prove beneficial. Dr. Churchill has also seen good done by the counter-irritant action of blisters and mustard poultices, particularly where there was any tendency towards bronchial complications. If the disease advance to the third stage, he thinks that it will be of little use to carry the depletion further, as the result would be loss of the patient's strength. Expectorants are to be administered, and vomiting is to be occasionally excited. The exhibition of antispasmodics, such as camphor, musk, assafœtida, etc., tepid baths, stimulants, and the inhalation of the vapor of ammonia, camphor, or ether, with aqueous vapor, he regards as useful.

These three writers, then, gentlemen, who are certainly authorities, agree, you will observe, in recommending the use of powerful antiphlogistics, viz. bleeding, tartar emetic, and calomel. Several other remedies have been mentioned by other physicians, which perhaps are worthy of attention. The celebrated Dr. Graves says in the second volume of his clinical medicine:—"In the eighth volume of the Dublin Medical Journal, I published an account of a method of treating this disease, which was proposed by Dr. Lehman, of Torgau. This method has the advantage of being simple, efficacious, and easily applied, and its good effects are not productive of any injury to the constitution. The proper time for the application of this method is at the commencement of the disorder, when, as is usually the case, the child is awakened suddenly during the night by its invasion; no time should be lost when we observe that the breathing is anxious, disturbed, and attended with the well known croupy sound, and a cough of a varying character, etc. The disease may be arrested in its progress by the immediate application of hot water in the following manner: a sponge about the size of a large fist, dipped in water as hot as the hand can bear, must be gently squeezed half dry, and immediately applied beneath the little sufferer's chin over the larynx and windpipe; when the sponge has been thus held for a few minutes in contact with the skin, its temperature begins to sink, and it requires to be dipped again in hot water. It is better to have a second sponge ready, so that they may be applied alternately. A perseverance in this plan during from ten to twenty minutes produces a vivid redness of the skin over the whole front of the throat, just as if a strong sinapism had been applied; this redness must not be attended or followed by vesication. In the meantime the whole system feels the influence of this topical treatment; a warm perspiration breaks out, which must be encouraged by warm drinks, as whey, weak tea, etc., and a notable diminution in the frequency and tone of the cough, while the hoarseness almost disappears, and the rough ringing tone of voice subsides along with the dyspnœa and restlessness; in short, all danger is over, and the little patient falls asleep, and awakens in the morning without any appearance of having recently suffered from so dangerous an attack. Since then," continues Dr. Graves, "I have repeatedly treated the disease on this plan, and with the most uniform success. It is, however, only applicable to those cases which are seen at the very outset of the disease, and you must remember, also, that I do not propose it to the total exclusion of bleeding and tartar emetic, which must be used in more aggravated cases, or in those which are not seen until the disease is somewhat advanced." Dr. Grahl, applying the same remedy in a different part of the body, recommended the use of warm baths in croup. According to him they are indicated at the beginning of the second stage; the arms of the patient are to be placed in a vessel deep enough to admit them at least a hand's breadth above the elbow-joint, and filled with water as hot as it can be borne; a cloth also is thrown over the head of the patient, which is so arranged as to allow him to breathe the vapor for a quarter of an hour at short intervals. This treatment produced, in Dr. Grahl's hands, the expectoration of the exuded lymph, but I am not aware whether any one else has tried it. Many physicians prefer the use of sulphate of copper, as an emetic, to the tartrate of antimony and potassa. Dr. Schwabe commences by applying four to twelve leeches to the larynx, and then orders from one to four grains of the salt to be given every hour or every half hour according to the urgency of the symptoms. Others again find equal advantages in the sulphate of zinc, in the turpeth mineral, or yellow sulphate of mercury, in lobelia inflata, in sanguinaria canadensis, and in the decoction of senega. Dr. Horace Green, of this city, applies a solution of nitrate of silver to the interior of the larynx. Dr. Meigs, of Philadelphia, confides in the use of alum. M. Ozanam had great success with bromide of potassium given in doses of from one to ten grains a day, while Mr. Hird puts his trust in ten or fifteen minims of liquor potassæ every four hours; and one gentleman of this city cures all his cases of croup by saturating the system with muriate of ammonia. I might extend this list indefinitely did either your time or my own allow it. But, gentlemen, I do not believe that any of these remedies possess one-tenth part of the value claimed for them; in fact, the majority, while highly praised by their original proposers, have signally failed in the hands of others; and I also beg to protest emphatically against treating a case of croup by bleeding and tartar emetic combined. The necessity of abstracting blood from the arm, or by means of leeches, is what I cannot well understand; for it seems to me that the blood is quite as much one of the tissues as the muscles are, and that, therefore, we have no right to remove it, that it will all be required in the course of the disease to support the patient, and that our experience of the effects of venesection does not by any means justify us in resorting to it. The general reluctance at the present day to use the lancet appears also to support this view. We no longer bleed in acute inflammations; we have totally abandoned the practice in pneumonia: Why should we continue it in croup? Croup also is a disease that results finally in complete exhaustion, and it occurs, at least in our cities, in debilitated children. Now, I would ask you whether in a child of feeble constitution, attacked by a malady that advances to profound prostration of the vital energies—in such a case, I say, if you employ so powerful a depressant as tartar emetic, do you not add moral insult to therapeutical injury? Our aim should be rather to husband our means. Since tartar emetic has no specific action upon the mucous surface to prevent the effusion of false membrane, since the only antispasmodic power it possesses results from the violent shock it produces, and since its other indications can be fulfilled by equally active, but less dangerous means, its use, except in rare cases, should be discarded. The first consideration in the treatment of croup is its prevention. When we have reason to fear its appearance in a family, or when it has already seized on one child, and we wish to save the others from it, it is our duty, as far as we can, to remove or neutralize all predisposing or exciting causes. From such climates and localities as have been mentioned as favorable to the disorder, the children are to be taken away; or, if this be impossible, the constitution is to be put in good order by suitable clothing, proper food, and the other hygienic means at our command, while the first symptoms are to be carefully watched for, and treated immediately on their appearance.

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MM. **Dechambre** and **Delpech** have still further investigated the subject of the decoloration of tincture of iodine by urine. They have already shown that this test, proposed by Trousseau as a test for sugar in the urine, is of no value. The decolorization, according to them, depends upon the presence of saline matter in the urine, and particularly of uric acid and the urates. Lately, they have operated with the alkaline urine of carnivorous and herbivorous animals; and they find that the decolorizing power of the urine of carnivorous animals is very great, and that of herbivorous animals scarcely appreciable.—*Brit. Jour.*

M. **Barral** has presented to the Academy of Sciences some remarks of much interest concerning the crust of bread and the gluten contained in it. He had recently shown that, when equally dried, the crust of bread is more highly azotised than the crumb; and he also showed that the crust was more soluble than the crumb in water.—*Brit. Jour.*

Professor Scanzoni has gone to St. Petersburg, to attend the Empress of Russia during her confinement.—*Brit. Jour.*

Original Communications.

DRAINAGE FROM WOUNDS

AFTER EXSECTIONS.

By S. I. RADCLIFFE, M.D., Act. Assist. Surg. U.S.A.,

U.S. GENERAL HOSPITAL, ANNAPOLIS, MD.

The article on "Exsection of Head of Femur," with the gratifying result from the use of "drainage tubes," in the American Medical Times, for July 11, by Surgeon David P. Smith, U.S.V., deserves consideration.

Every item that may be added to facilitate the reparation of parts, or fill up the often great solution of continuity, made necessary by exsections or other similar operations, will tend much to decide the problem in this department of conservative surgery, whether or not they are at all times admissible, *i. e.* whether we may substitute them in all cases of compound comminuted fractures, especially of the joints, for amputation.

It is not our intention now to enter into a discussion in regard to resections or exsections, or their relative value, but to say a few words on the manner of after-treatment. Almost every surgeon has his peculiar mode of operating—whether it is the straight, the crucial, the X, the H, the T, the L, the V, the elliptical, or other incision. (We will not say whether this or that is adapted to the greater number of cases.) And every surgeon has his particular mode of uniting the incisions, his particular suture, and mode of treatment. Surgeon Smith's plan of drainage is very excellent, and it may answer fully as well for other descriptions of suppurating wounds or abscesses. It is often a source of great annoyance that the surfaces of wounds close over, encircling large cavities inclosing abnormal discharges, which are in many cases the cause of extensive sloughing and great destruction of surrounding tissues. The use of such drainage tubes, it seems to me, would facilitate very much the discharge, act as a tent, and render extensive incisions to empty such accumulations unnecessary.

It seems, however, there may be some objections urged against their use. We have not used them, and of course cannot speak from experienee; all we may say, is, therefore, entirely suggestive. We think they may be an inconvenience, if not an annoyance or direct pain to the patient, by infringing upon parts made quite sensitive by the operation, probably upon nervous filaments or denuded nerves; or they may be a superadded irritant to the wound, may act as any foreign body, and may result in active inflammation. They may be inconvenient and troublesome to the surgeon or attendant by the difficulty in retaining them in position, by constant removal and readjustment, by their tendency to become foul, and from the incompleteness of the drainage.

We think there is a better method, and one which we have seen, and employed in this hospital with great advantage—one, we think, less liable to objection, and will meet all necessary indications—that is, by suction, or by withdrawing the discharge with a syringe. This plan was introduced in this hospital by Surgeon B. A. Vanderkeift, U.S.V., in charge; and from its entire eligibility and fitness, and the singular completeness with which it operates, I am induced to regard it *par excellence*, especially in resections where the part resected is required to remain immovable or in a quiescent state for a considerable period after operation, in order to form strong union or firm adhesion of the contiguous parts. The nozzle of the instrument may be introduced at any orifice of incision or in the original wound, and its liquid or semi-liquid contents drained, and at once and completely. Its performance is so simple that any assistant or attendant may use it with the greatest ease, subjecting the patient to no pain, and causing no disturbance of function or healthy action in the part, or hæmorrhage; and so convenient that it is attainable at all times, and may be always ready for use. Indeed, it is so simple that we need not attempt an explanation of it. It requires no directions, as any one at all conversant with the instrument can use it with the greatest facility. A syringe of almost any size or kind may be used, so the aperture in the nozzle is sufficiently large to admit the drainings; one of metal is better than one of glass, as it is not so liable to be broken. The piston should be well fitted, work smoothly and evenly, and it should be kept clean by occasionally rinsing with clean water.

Another item in the treatment of exsections or resections we would mention here, and that is the dressing. It is a common, I might say a constant and universal practice to employ simple or cold-water applications to all wounds, whether incised, penetrating, gunshot, or others, and yet we have seen the happiest results from *dry* dressings. After operations either in resections or other surgical operations, no application is made, but simply a piece of dry muslin laid over the wound, and, if in warm weather, a little spt. camphor sprinkled over the cloth to keep the flies, which are apt to be pests about suppurating wounds, from accumulating on it. The lint is laid in loosely packed oakum, this simple dressing applied, and the discharge drawn off with a syringe. We do not argue the value of this dry dressing, but believe it resides principally in its negatively "assisting the progress of disease," in contradistinction to Prof. Bennett's theory of positive "assisting the progress of disease;" or rather not lowering the vital powers of the part, as is too apt to be done by continued cold applications; and the temperature is more likely to be equable than can possibly be the case, unless the cold be applied regularly and thermometrically. Of course we say nothing pertaining to stimulating and nourishing diet—they are inseparable.

MEDIAN LITHOTOMY.

By J. GRAFTON, M.D.

WATERTOWN, JEFFERSON CO.

On June 8, 1863, assisted by Drs. Lowe, Hannahs, Hale, Clark, Kinney, Webb, and Sill, I removed by median incision from the bladder of Mr. Totman, of Adams, ætat. 69, eight calculi, varying in diameter from the size of a butternut or chestnut to that of an almond. The steps of the operation were precisely similar to those which I described in the case of Mr. Allen, reported in your Journal, October 12, 1861, page 231, the length of the incision in this case being precisely one inch and a quarter, which gave ample room for the use of Tiemann's improved forceps.

The chief points worthy of comment in this operation were:—

1. A remarkably deep perineum, the patient being an extremely thick-set muscular man.

2. An enlarged prostate, the middle lobe projecting upwards into the bladder, preventing the use of the scoop which I had predetermined to use, believing the calculi to be small, from the fact that about a year previously the patient had undergone the operation of lithotrity in a distant city.

3. In consequence of this enlargement of the prostate, and the great depth of the perineum, it was necessary to bury a pair of forceps, nine inches long, up to their rings—and then only by raising the handle towards the pubic symphysis, and depressing the blades towards the rectum, could I succeed in touching the calculi, which lay behind this promontory of the prostate in a sort of pouch entirely out of reach of the finger, as in my former case, rendering it necessary, before I could seize them, to introduce the *fore and middle* fingers of my left hand into the rectum to elevate this pouch towards the jaws of the forceps.

4. The necessity of thoroughly exploring the bladder, and being provided, in addition to the ordinary instruments, with a *curved* and straight sound; for in this case the last calculus removed occupied a different position from the rest,

appearing to lie above the symphysis, perhaps held there by the contracted condition of the empty bladder, or possibly partially encysted there, as it was not dislodged without some force, and then only on making firm downward pressure with the hand from above.

The subsequent progress of the case has been remarkably satisfactory. The patient left his bed in a few days, and on the fourteenth day the small wound had entirely healed.

My experience of this operation is entirely too limited to urge its superiority over the lateral. I would only say that the objection urged against it, "*want* of room," would not induce me to abandon it; for this reason, that, in case of an unusually large stone which I could not break, I should not hesitate to carry my incision downwards into the rectum, freely dividing its anterior wall.

The median incision is admirably adapted for small calculi; and in the case of large ones I believe that, in the majority of instances, they could be readily broken, and removed by Tiemann's improved sequestrum forceps, which have lately rendered me efficient service in removing a calculus weighing one ounce and eighteen grains from the bladder of a lady in our village a few weeks since. They are so constructed as to be readily passed through the dilated urethra, and have sufficient strength to crush a tolerably hard stone.

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SCURVY IN THE NAVY.

By R. S. FARQUHARSON, M.D.,

PASSED ASSIST. SURGEON, U.S.N.

(*Continued from page 37.*)

Though somewhat apart from the present subject, it may be mentioned, *en passant*, that the quantity of solid food in our ration is too great, that very few men can eat it, and that the health of our ships' companies—rarely exposed to extreme cold, and leading a life of comparative inactivity (inactive in comparison to that of their brethren of the merchant service)—would be better upon a smaller allowance of solid food. The latter inference is supported by the good health of British sailors, and even they rarely consume their whole ration, hearty feeders as they are esteemed. However, to return to the subject, the solid part of the rations is very much the same, though ours surpasses the other in variety as well as quantity. Upon looking over the list of articles in our ration as they may be issued during one week at sea, viz. beef, pork, bread, flour, beans, peas, rice, butter, cheese, sugar, tea, coffee or cocoa, raisins or other dried fruit, molasses, vinegar, pickles, and whiskey, we are surprised to find that but three of these articles (vinegar, dried fruit, and molasses) have any pretensions to antiscorbutic virtue, and these of the slightest kind. Now, in what consists the boasted excellence of the ration of the British navy? In what does it surpass ours? Why can it be said truly in regard to the former, "That the health of crews, long afloat, and exposed to every variety of external condition, appears to be preserved to the full as well as that of persons subject to similar vicissitudes on shore?" (Carpenter's Hum. Phys., p. 342, Am. Ed.)

On the other hand, Why have we, with a feeling somewhat akin to shame, to remember the fact, that during the recent war with Mexico two of our vessels were almost or quite disabled by a disease now absolutely unknown in the British navy? The answer to this is to be found in the important fact, that on board H.B.M.'s ships an ounce of lime-juice is served out daily to each man, beginning two weeks after the issue of the last fresh ration, and the issue of this indispensable article can at any time be made more frequent or larger at the option of the surgeon. But it may be asked, What becomes of the allowance of lime-juice and of crystallized citric acid granted in the medical outfit of every vessel going to sea? The quantity of the former is so small as to show that it is intended to be used as a remedy, and not as a prophylactic (though in this case the old adage might be reversed, and a pound of prevention found to be better and cheaper than an ounce of cure). In regard to the citric acid, it will hereafter appear as highly probable, that it possesses little or no antiscorbutic power, certainly not more than that of vinegar.

Pathology.—The old notion of the blood in scurvy being in a dissolved state, or in a condition resembling that of blood defibrinated by art, should have been laid aside when crude notions gave way to the accurate analyses and strict investigations of more modern times in the comparatively few cases of scurvy that now occur. But such is not the case; for not only do writers of excellent authority, when treating of other topics, incidentally allude to such a condition of the blood in scurvy (vide Tweedie's Liby. of Pract. Med., article Cachæmia, p. 59), but a recent author on the subject of scurvy actually assumes this partially defibrinated state, or a lack of the "*proteinous elements*," as the basis of his view of the pathology of the disease, and in consequence gives "*starch and lime-juice*."

That there is no dissolution of the red globules in the serum, nor any lack of the albuminous or proteinous elements, is shown from the statements of Dr. Budd (article Scurvy, Tweedie's Library of Pract. Med.):—1st. That the intermuscular and other effusions so common in scurvy, never, unless superficial, consist of blood, but in all cases of plastic lymph, often organized and connected to the adjacent tissues by blood-vessels. 2d. That in cases where blood has been drawn (for purposes of experiment), as complete a separation into serum and clot as is observed in other ordinary cases. 3d. The analysis of the blood in three cases of well marked scurvy, showing a large increase of both fibrin and albumen. This analysis, when compared with that of the blood of a healthy sailor, gives the following result:—

	Water.	Hæmat.	Fibrin.	Albumen.	Salts.
Average of three cases scurvy.	843·0	60·2	5·6	78·2	10·6
Normal case	788·8	133·7	8·3	67.2	6·8
Giving for scurvy	+54·2	—73·5	+2·8	+11·0	+ 8·8

Admitting fully the fallacy of all direct deductions from chemical analysis in regard to either pathology or therapeutics, even of what are termed blood diseases, the above comparison, showing, as it does, how scorbutic blood contains an excess of all the ingredients except hæmatosin, may serve as a guide in comparing scurvy with other more common diseases whose pathology is better understood. Using, then, the above formula of the blood in scurvy, and comparing it with others, the results of analysis of the blood in diseases in which there is a profound alteration of that fluid, we arrive at the singular, and, it may be, important conclusion, that in its blood changes scurvy more nearly resembles chronic rheumatism than any other disease. In both there is the same anæmia from the diminution of the red globules and an increase of the watery element; in both, the same increase of fibrin; alike, again, in both affections having a "*peculiar inflammation*," with plastic effusion, not prone to suppuration and the extreme degrees of ordinary inflammation; and lastly, alike in being speedily and certainly remediable by the salts of potash. The most recent views in the pathology of this disease (to my knowledge) are those of Dr. Garrod and of MM. Becquerel and Rodier, the former assuming a deficiency of the potash salts, and the latter a redundancy of the salt of soda.

We come now to the last and most important, but fortunately, in a practical point of view, the easiest part of the subject.

Since the year 1564, the juices of limes, lemons, and of unripe oranges, have been known to be singularly efficacious in the treatment of scurvy. In 1795 lime-juice was introduced into the ration of the British navy by an Admiralty order, and from this period may be dated the final expulsion of scurvy from that service, and the "*sudden diminution of the sickness and mortality to an extent scarcely credible.*"

It is useless to insist on the well known fact of the power of lime-juice in curing scurvy, as there is but one recorded instance of its failure, and this may be the exception that proves the rule. A more important consideration is, Upon what does this curative power depend? Is it, upon different principles, to be found in the various antiscorbutics? or is it rather upon something common to all? The last will be found to be the case, for, upon a survey of the host of articles of admitted virtue, all will be found to contain some salt of potash. The green, herbaceous parts of plants, with the juices of unripe fruits, we are told by chemists, abound with the various salts of potash, the alkali being here in combination with some one of the vegetable acids, citric, acetic, malic, tartaric, oxalic, etc.; but, as far as this action in the animal economy extends, they may be regarded as the salt, being all converted into the carbonate during their passage through the body. Again, all the following articles which have been found of service, either in the prevention or cure of scurvy, will be found to contain potash, viz. lime-juice, unripe fruits, oranges, guavas, apples, the uncooked plants of the cruciferæ, cabbage, cresses, turnip, or those prepared as sourkrout, raw turnip, beer made of spruce, molasses, wine, cider and the vinegar therefrom (pure vinegar, made by the German process in the acetous fermentation of alcohol, being an exception), gunpowder, saltpetre, and lastly, the potato, the effective antiscorbutic of our immense whaling fleet (by analysis found to contain citrate or tartrate of potash, possibly both).

This apparently hasty generalization derives further support and countenance from the interesting article of Dr. Hammond, U.S.A., on scurvy (Amer. Jour. Med. Sciences, Jan., 1853), where not only was the use of water containing potash found to procure an exemption from the disease where its causes were peculiarly rife, but in the treatment of cases one salt of potash was successfully substituted for another, as the necessity of a limited supply of each compelled.

"Both this (the bi-tartrate) and the carbonates, however, becoming exhausted at the first, I administered several other salts of the same article, both separately and with citric acid, without, however, perceiving that the latter article at all accelerated the cure."

A singular, but generally prevalent misapprehension exists in regard to the true curative agent in articles used as antiscorbutics; for instance, Becquerel and Rodier speak of treating scorbutus "by tonic regimen and the use of the vegetable acids:" here, however, the expression "*vegetable acids*" may be loosely used for the acid or supersalts of vegetable juices, and not, as the term would strictly convey, an idea of the pure, separated or crystallized acids, such as the citric, tartaric, etc.

Again, our greatest authorities, Wood and Bache (Dispensatory, article Citric Acid), speak of citric acid as antiscorbutic, and capable of supplying the place of lime-juice; hence I suppose our ships are bountifully supplied with it. That this is a mistake, the fact shown above that all antiscorbutics contain potash—the statement of Dr. Hammond, above quoted, of the inefficiency of citric acid—and, lastly, that it possesses no curative powers in rheumatism (a disease nigh to scorbutus), while lime-juice is all powerful—all go to render exceedingly probable. The correctness of the above views being admitted, I leave it to others more conversant with the economical point of the question to determine what shall be the antiscorbutic (if any) to be introduced into the sea-ration—whether we shall imitate the British and use lime-juice rendered unfermentable by the addition of a small quantity of spirits, or, as recommended by Dr. Hammond for the army, serve out some salt of potash—the bi-tartrate, as most palatable. The attention of the Chief of the Bureau is respectfully invited to the following leading points, insisted on and attempted to be established in the above remarks.

I. A "scorbutic taint" among the men of our navy with the present ration.

II. The imperfection of our navy ration, in not including any decidedly anti-scorbutic article.

III. The defective supply of a "*preventive*" in the medical department.

IV. The comparative pathology of scurvy.

V. A salt of potash, the true antiscorbutic element in every article.

VI. The want of antiscorbutic virtue in the "vegetable acids" when pure and uncombined.

Hoping an indulgent reception of the above random and imperfect production, the offspring of an abundant leisure during our recent cruise, and trusting that it has not trespassed too far on your time and patience, I have the honor to be, Yours, etc.

Reports of Hospitals.

FINLEY GENERAL HOSPITAL, WASHINTON, D.C.

GUNSHOT WOUND OF ARM—RESECTION—ERYSIPELAS—PYÆMIA—DEATH.

By T. R. POOLEY,
MEDICAL CADET, U.S.A.

J. R. Perkins, private, Co. A, 121st Regt. New York Vols., was wounded in the action at Chancellorville, May 3, 1863, by a minié ball, which entered the inner side of the arm three inches below the head of the humerus, and passed directly through the limb, shattering the bone. Upon his arrival at this hospital, May 7th, he was placed under the care of Act. Assist.-Surg. Keys. On examining the wound it was found very much swollen and the edges gaping widely, a partial resection having been performed on the field. The inflammation gradually subsided, and on May 15th a consultation was called, and it was decided to perform resection. Accordingly, the operation was performed by Dr. Keys, by extending the incision which had previously been made about four or five inches, and three inches more of the shaft of the humerus were removed. The patient rallied well; the edges of the wound were brought together with sutures, and irrigation was applied to keep down inflammation. The wound now took on healthy action, and the patient continued improving rapidly until May 23d, nine days after the operation, when he was seized with severe rigors, followed by violent febrile action, which recurred regularly every day until the night of the 27th, when typhoid symptoms were manifest, with erysipelatous inflammation of the wound. His stomach, which had been very irritable since the first appearance of the rigors, now rejected everything. May 28th.—Unfavorable symptoms increased; pulse 120, and feeble; tongue dry and parched. Irritability of stomach continues. Erysipelas extending; it has reached to the shoulder, and about three inches below the elbow. Solution of ferri sulphas and bromine was applied, and tonics, stimulants, and nourishing diet, ordered in as large quantities as the stomach would tolerate. Has been able to retain a little brandy and water. Other symptoms about the same; he complains of pain in the chest, without being able to refer it to any particular spot; has slight cough. Seven P.M.—Complains of pain when coughing; has dyspnœa and a cadaverous countenance. Tongue very dry; complains of great thirst. Pulse about the same as in the morning; skin moist; passes water freely. Bowels quiet, free from pain, but complains of a sensation of great heat in the abdomen. Wound continues to discharge tolerably healthy pus. May 29th.—Tongue again moist; respiration hurried; extensive dulness over both lungs; still has the same anxious, cadaveric look; does not complain of pain. Thirst continues; erysipelas almost disappeared under treatment. Eleven A.M.—Asked to be raised in his bed to drink; drinks freely; appears cheerful, and asks to sit up in his chair. After sitting up in bed a few minutes requested to be laid back, and immediately died.

Autopsy, about six hours after death.—Body well developed. Rigor mortis well marked. *Thorax.*—From three pints to two quarts of bloody serum mixed with coagulable lymph was found in the pleural cavities. The lower borders of both lungs were studded with metastatic abscesses. The heart was perfectly normal. *Abdominal Cavity.*—All the abdominal organs presented a healthy appearance. The wound was now opened, and the parts examined; the ends of the bone were found neatly trimmed, and coagulable lymph had been abundantly thrown out; the pus secreted by the wound was small in quantity and healthy in appearance.

Of course, cases similar to the one above related will always be frequent after the severe gunshot injuries received in battle, the necessary disturbance of transportation, and the surgical procedures so often required. In this instance, to all the other sources of irritation were superadded that of an exsection performed on the field of battle—an operation difficult to perform properly under such circumstances, and the good effects of which, if ever so well done, are liable to be frustrated by the subsequent and often violent jolting of necessary transportation. It is worthy of the most serious consideration whether such operations had not better be deferred till the sufferer has reached his destination in some permanent hospital.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, January 7, 1869.

DR. JAMES ANDERSON, PRESIDENT, IN THE CHAIR.

FRACTURE OF LOWER JAW, TREATED BY INTRA-DENTAL SPLINTS.

Dr. Austin L. Sands read the following case of fracture of the lower jaw, and exhibited an improved apparatus for its cure. Within the past two months I have had under my observation and care a case of fracture of the lower jaw. The means used for the cure being, as far as I know, entirely novel and perfectly successful, I have taken the liberty of presenting them to the members of the Academy.

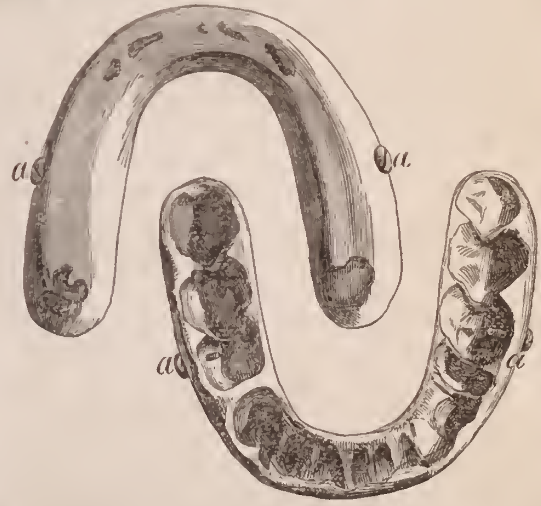
Mr. J. P. Gunning, the gentleman receiving the injury, is by profession a dentist, and a thorough knowledge of his profession enabled him to devise and execute the means used for his cure.

Some time before receiving the injury he had mentioned to me his plan for securing a broken jaw, and I had promised, in case of meeting with such an injury, to try it. It so happened that Mr. G. was the first to receive the benefit of his ingenuity, fracturing his lower jaw by being thrown from his horse. The fracture extended from the right canine tooth obliquely to near the symphysis. The soft parts covering the bone were lacerated, and the displacement was sufficient to allow the placing of a finger between the teeth. The apparatus used for securing the fracture was a vulcanized india-rubber used as a splint, covering the teeth entirely, and secured by a fine screw on each side passing into a molar tooth. In this case, after securing the fractured extremities by passing a ligature tightly around the teeth at the seat of fracture to keep them in place, an impression of all the teeth of the lower jaw was taken in wax. From this a plaster mould was made, and on this the vulcanized rubber was cast. In this way was formed a splint covering and fitting accurately to all the irregularities of the teeth of the fractured jaw. A small hole was made through the outer side of the splint to allow the passing of a fine screw through it to be fastened into the first molar tooth on each side, to keep the splint from working up. It fitted so closely there was no necessity for it, as it has been worn since the first application without the screw. The instrument was made and applied some eight hours after the injury was received. As soon as it was adjusted the fractured extremities seemed to be so securely held in place that I did not consider a bandage necessary. On the following morning the patient was in his office attending to his business, and continued to do so regularly. The splint remained on without being removed for twenty-four days. It was then taken off to see the condition of things, and a very good union was found to have taken place, sufficient to allow the patient to talk with ease to himself. The splint was then replaced without putting in the screws, and was worn regularly till the expiration of six weeks from date of injury. After that it was only worn while eating, or during the performance of his dental operations, when the muscular force used brought some strain upon the jaw. The splint fits so closely that food cannot work up between it and the teeth, and by using a syringe the parts were kept perfectly clean and pure.

The advantages derived from the instrument are the perfect steadiness with which the fracture is held in place, the great comfort to the patient in being able to eat and talk, and if the fracture is in the anterior part of the jaw, being able to go without the application of a bandage, trusting entirely to the support of the splint. This would not be the case if the fracture was behind the first molar teeth, as there would not be sufficient support from one or two teeth to hold the fracture in place. In that case the ordinary bandages would be required, and the splint would merely assist in steadying the fracture and giving an even bearing for the upper jaw to rest on.

After a careful consideration, I am led to believe that this splint can be made of great assistance in all cases of fracture of the lower jaw, where it is such as to require the use of bandages, overcoming irregularities in the jaw from the loss of teeth or irregular conformation, as the rubber can be moulded in any shape required, giving an even bearing to be bound up against the upper jaw, with indentations in the upper surface of the splint for the teeth of the upper jaw to rest in, holding the fracture in that way perfectly steady.

An opening can be left in the front to allow the introduction of liquid food, and the instrument need not be removed till the cure is complete.



a, a, a, a, Screws by which the plates are secured to a molar tooth on each side.

Dr. Stevens.—I look upon the contrivance as far beyond anything in our way of treating fractures of the lower jaw that has ever been discovered. Like every other useful discovery, it has the advantage of great simplicity. As Dr. Sands has well remarked, it is not strictly applicable to fractures of the inferior maxilla, posterior to the canine teeth, but it may be made a great adjuvant even in the treatment of such cases. I congratulate the Academy on behalf of this discovery, for I firmly believe it to be of such importance as to last for ever.

Dr. Post remarked that Lonsdale had already advised a somewhat similar apparatus for the treatment of that variety of fracture. The plan was first to take a wax cast of the teeth, and then carve from that cast an ivory one, to adapt itself exactly to the teeth of the lower jaw. But, besides this, there was a wooden splint adapted to the base of the jaw, and the two screwed together. This apparatus was advised by Lonsdale in all cases of fracture of the lower jaw, but particularly those in which the upper teeth being defective, there was not sufficient support afforded by the upper jaw. The principle of Dr. Sands's splint was the same as that of Lonsdale, though the material and mode of construction were peculiar.

Dr. Stevens.—The statement of Dr. Post is the only attempt of anything of the kind that has been made, so far as my reading or knowledge extends, but it was not of a character to diminish materially the value of this discovery. It has never been adapted to practice, and is almost entirely forgotten.

Dr. A. L. Sands stated that his idea of Mr. Lonsdale's splint had been simply a carved piece of ivory adapted to the teeth of the lower jaw. In any event he did not think it would compare to the adaptability of Mr. Gunning's apparatus.

Dr. Anderson.—Mr. Gunning says that the cast had better be taken as soon as possible after the accident, in order to provide against the consequences of the gums swelling.

Mr. T. B. Gunning.—The difficulty to be surmounted in promptly taking a cast of the jaw is not so much due to the swelling of the gums *per se*, as to the difficulty (in consequence of the swelling) of opening the mouth wide enough.

Dr. Peaslee.—I would like to ask in what form the article can be purchased, in order that we may use it?

Mr. T. B. Gunning.—It is very easily obtained, but not so easily worked. The most experienced surgeon would probably find it more to his advantage to call in a dentist to his aid, for there are a great many details about geting an accurate cast of the jaw, which one not acquainted with mechanical dentistry would not be prepared for. The surgeon should find the brains, while the dentist attends to the mechanical part. The material is Goodyear's patent hard rubber, and may be obtained from any of the manufacturing dentists, but particularly of Franklin, who is the agent for it.

The Meeting was then adjourned.

American Medical Times.

SATURDAY, AUGUST 8, 1863.

PROVISION FOR DISABLED SOLDIERS.

Among the questions growing out of the war which are to interest philanthropists, one of great importance is the proper disposition of disabled soldiers. Every country that maintains a large military force must have some system of pensioning and of support of those disabled in the Government service. The obligations of the United States to the future care, and, if necessary, the support of its disabled soldiers, is, if anything, more sacred than that of other governments to the same class. It is by their fidelity, bravery, and personal sacrifices, that this Government has, and will have, an existence. The extent to which this country is to be taxed on this score is thus foreshadowed by a competent authority:—

They calculate that, if it continues a year longer, not less than a hundred thousand men, of impaired vigor, maimed, or broken in body and spirit, will be thrown on the country. Add to this a tide of another hundred thousand men, demoralized for civil life by military habits, and it is easy to see what a trial to the order, industry, and security of society, and what a burden to its already strained resources, there is in store.

In the establishment of the Invalid Corps our Government has already taken the first step in the solution of this question. Large numbers of disabled soldiers are now employed in the public service who would otherwise become pensioners both upon the Government and people. But this is not all that must be undertaken for the future welfare of this class of soldiers. It is gratifying to notice that this subject is already attracting the attention of the Sanitary Commission, which is ever anticipating as well as immediately supplying the wants of the soldier. To determine the nature of the provisions made by European governments for disabled soldiers, and as a preliminary study of the subject, the Commission instructed **Mr. S. G. Perkins**, of Boston, a gentleman interested in these inquiries, and who was about to embark for Europe, to collect information. In May last **Mr. P.** submitted his report, which contains an interesting sketch of the pensioning and hospital systems of France, Prussia, Austria, Russia, and Italy.

From a review of the information gained, **Mr. P.** concludes that, in France and Italy, the provision for the common soldiers, as well in regard to the terms on which the pension and the right of admission to hospital are accorded, as to rates of pension allowed, and to the care of their widows and children, is far more just and humane than that existing in Germany. In Prussia and Austria, the minimum pension of the common soldier is a mere pittance, which can go but very little way towards supporting him, and only those most severely injured gain admission to the hospitals. In France, the pensions have been raised several times, and the minimum now for the common soldier is one franc a day. In Italy, it is about fifty-five centimes; in Prussia, twelve thalers *a year;* and in Austria, five kreutzers (say two cents) a day. The average of all the pensions of subalterns and soldiers in Austria appears to be only twenty-eight florins per annum, or between three and four cents a day. He also notices a striking contrast in the treatment of officers and soldiers. In France, about one-fifth of the pensions is paid to officers, and the amount so paid is about fifteen thirty-thirds of the whole payment; whereas in Prussia, only one-sixth of the pensions belongs to officers, but it absorbs twenty-eight thirty-thirds of the payment; while in Austria, the pensions of the officers and their widows are one-fourth of the whole number, and absorb about twenty-eight thirty-thirds of the whole payment. In contrasting France and Italy, it appears that although the rates of pensions are about the same (allowing for the cost of living), and the terms of admission both into the ranks of the pensioners and into the invalid establishments are very similar, the practice of the pensioners is quite different. While in France, the number in hospital is constantly diminishing, and the inmates and admissions consist almost entirely of men over sixty years of age, and the whole number of invalids is only about two thousand, with a pension list of over fifty-seven thousand, in Italy there are over ten thousand men in the hospitals, with a pension list of about thirty thousand. The returns from all these countries agree in one particular, and a very important one for our consideration, viz. that, in consequence of the laws establishing pensions and hospitals having been made at different times, and without due regard to each other, there is no just proportion between the cost of maintenance of the invalids in hospital and the rates of pension allowed, even where the latter are the most liberal. For example, in the year 1861 there was an average number of 2,302 invalids in the Hotel des Invalides in Paris, and the cost of maintaining them, including all salaries, and the charges for repairs of the Hotel, but no rent, was frs. 2,313,744.41, equal to frs. 1,005.10 per head. The amount of pensions which would have been paid to these persons, had they not entered the hospital, would have been, as nearly as can be ascertained, frs. 1,150,890, or, say, frs. 548.30 average, per man, a cost to the State of nearly twice as much in hospital as the amount of their pensions. A similar result is found in Italy, where the hospitals are crowded. The contrast is still greater in Germany. The 480 invalids in hospital in Prussia cost more in proportion to the average of pension than the French invalids do; and in Austria, where the average of all the pensions of subalterns and soldiers is only 28 florins per annum, the average cost of 200 officers, and 201 soldiers and subalterns, in the six hospitals and Filialien, is 162 florins per head per annum. The general conclusion is, that all laws establishing pensions and invalid hospitals should be made with reference to each other.

Mr. Perkins remarks, that the great point to be avoided in framing our law, and yet one which seems to have been almost everywhere overlooked, is the failure to provide regular civil occupation for the invalids. For want of this, it has been found impossible at the Hotel des Invalides, in Paris, to prevent drunkenness. Dr. Faure, the head-physician of that establishment, told him that it was common for the invalids to sell their rations of meat and bread, in order to obtain the means to buy brandy, and that nearly all the punishments which they were forced to inflict, arose from drunkenness. Other officers of that establishment corroborated his statement, and all said, if you establish an invalid hospital system, let regular occupation for invalids be the corner-stone of it.

He especially recommends two features in the foreign systems: First, the Prussian and Italian plan of dividing all the invalids into two classes—one still fit for stationary duty, and one unfit for military duty, from the former of which the garrisons, in certain proportions, are recruited. By extending this to all pensions, and allowing those fitted for service to volunteer for garrison duty, perhaps a considerable number of pensioners might be saved, as it is presumable that the United States Government will be obliged to maintain numerous garrisons for many years after the present war shall have come to an end. Second, the Prussian plan of issuing warrants to military pensioners by government, securing them appointments to the first places vacant in certain subordinate branches of *civil* service (such as the railroads, post-offices, custom-houses, etc.), for which they may be found fit, to the exclusion of competitors from civil life, and as fast as they are provided with places in the civil service, they are stricken off the pension list. This system is very economical for the government, but in Prussia it works a great evil, by building up a military caste among the lower orders of society, analogous to the one which exists among the upper classes. In the United States, he thinks we should have little to fear on this score; and as our Government is obliged to maintain a multitude of subordinate officers in the custom-houses, the post-offices, etc., it might be no disadvantage to have half the number consist of men entitled to hold their places during good behavior, and so removed from the corrupting influences of political changes.

We have copied largely from this interesting report, the better to present its statements and conclusions. We shall hereafter notice the scheme proposed by the commission, and by Mr. Perkins. In conclusion, we quite agree with the author it is very important, for economical and other reasons, that a variety of occupations should be offered to them, so that the different tastes and habits of men may be suited, as far as possible, and the number of idle pensioners in the republic reduced to the utmost; and no invalid ought to be left in the position to complain, that with a pension less than sufficient to support him, he is forced to compete in the open labor market with able-bodied men.

THE WEEK.

The New York Soldiers' Depôt grew out of the necessity of having an institution in this city devoted to the immediate care of the New York sick or wounded soldiers on their arrival from the field of battle or from hospitals. The sum of $200,000 was appropriated by the last Legislature for this purpose, and placed at the disposal of the Governor. The Governor appointed a Board of Managers, consisting of ADJUTANT-GEN. SPRAGUE, INSPECTOR-GEN. MILLER, QUARTERMASTER-GEN. TALCOTT, and SURGEON-GEN. QUACKENBUSH. This Board selected the large and commodious building 50 and 52 Howard street, and had it fitted up with every convenience for the comfort and proper care of the sick. No hospital could be more complete in all its appointments and details. The superintendent selected by the Board, COL. NEVILLE, is a thorough disciplinarian; and the Resident-Surgeon, DR. WELSH, is a man of experience and skill. The "Depôt" has numerous agents who visit Washington and other points, where soldiers may be found *en route* to New York, and who furnish them all suitable aid. A Board of Consulting Surgeons and Physicians is also attached, embracing some of the most eminent members of the profession of the city. Since the opening of the institution, now about two months, upwards of five thousand soldiers have received its benefits.

The comparative liability of white and colored troops to diseases of a malarious origin has long since attracted the attention of the English authorities, and has doubtless greatly influenced the composition of their forces serving in malarious countries. From the annual report of the British army for 1859, it appears that in Jamaica the ratio of mortality is as follows:—White 101·9, black, 8·2; Bahamas, white 159·0, black 5·6; Sierra Leone, white 410, black 2·4. These facts have an important bearing on the present policy of our Government in organizing negro regiments for service in the malarious regions of the South. Already SURGEON-GENERAL HAMMOND has been able to contribute an item of statistical information bearing on this point. In a recent communication to the Secretary of War he states that MEDICAL-INSPECTOR TOWNSEND reports, that in the Department of the Gulf white and colored troops are found serving together, and equally subjected to malarious influences. The ratio of sick, of diarrhœa, dysentery, remittent, intermittent, typhoid fevers, etc., is white 10·8 per cent., and colored 0·8 per cent. The argument in favor of the employment of colored troops at the South, if based on their comparative immunity from the diseases peculiar to that region, is conclusive.

By direction of the Secretary of War, **Dr. C. H. Nichols**, the accomplished Superintendent of the Government Hospital for the Insane, Washington, visited the Eastern Lunatic Asylum, Williamsburgh, Va. This is the oldest asylum for the exclusive treatment of insane in the United States. It has stood on debatable ground, but since the occupation of that village by the Union Army in 1862, has been in charge of the U.S. Government. The present medical officer is **Dr. James L. Watson**, Assist.-Surgeon 139th Reg. N.Y.V. It contained at the time of its inspection 216 patients; white 191, colored 25. The physician and attendants seemed intelligent and humane, and the institution seemed to be under proper discipline. The Asylum, like most of the public buildings of Eastern Virginia, has neither water-closet nor urinal, nor proper sewerage or water supply. **Dr. Nichols** did not advise any change in the management of the institution under existing circumstances.

It should be stated that the article by **Dr. Farquharson**, late of the U.S. Navy, was written upwards of ten years since, and is not to be taken literally as applicable to the regulations of the navy at present, but rather as illustrative of the causes and prevention of scurvy. The paper was transmitted to us by **Dr. F. H. Hamilton**, Med.-Inspector, U.S. Army. In another column the present law regulating the Navy ration will be found.

Reviews.

A Manual of Minor Surgery. By John H. Packard, M.D., Demonstrator of Anatomy in the University of Pennsylvania, etc., with 145 illustrations. Philadelphia: J. B. Lippincott and Co., 1863. Pp. 288.

Minor Surgery is practically more important than capital surgery, as it embraces a knowledge of all those appliances and methods which are comprehended under the term "good nursing." Upon it depends the fate of the majority of cases in surgery of whatever grade of severity. Whatever effort, therefore, is made to qualify the young surgeon in minor surgery, is deserving commendation. Our surgical literature is deficient in well written works on this branch of surgery. This subject is also much neglected in the schools—professors of surgery will occupy the whole course of instruction with the detail of theories, and the minute description of the large operations, passing over as unimportant those minor but everyday subjects which are so largely to occupy the attention of the young practitioner. It is of vastly more importance that the student should so learn by actual practice to apply a bandage and splint as to become an expert manipulator, than to familiarize himself with all the capital operations.

Until the appearance of Dr. Packard's work the Minor Surgery of Sargeant was the only American work adapted to students and junior practitioners. It has answered an excellent purpose, and we are glad to see it still passing through successive editions. It is to be regretted that more care is not taken in incorporating recent improvements, and omitting details that are now of little importance. A careful comparison of these two works does not satisfy us that Dr. Packard's is on the whole preferable to that of Dr. Sargeant. The former is somewhat more complete in the number of subjects introduced, but it is not more simple and concise in detail. The illustrations are quite inferior. We could not, therefore, pronounce the former the more deserving of the patronage of surgeons engaged in civil practice.

The work of Dr. Packard is, however, an addition to the literature of minor surgery, which is, it appears, well adapted to the army surgeon. It has received the unqualified approval of a Board of Surgeons appointed by the Surgeon-General. It is in this field that the work will doubtless find its appropriate mission and its chief success.

Correspondence.

REMARKS ON REGIMENTAL HYGIENE.

[The following letter of a regimental surgeon to Prof. Hamilton is worthy of attentive perusal.—Ed.]

Sir:—Knowing your great desire to improve the condition of the U.S. Army, and admiring the zeal you manifest in your very close and careful inspections, allow me to set forth to you, in as few words as possible, the past condition of the 18th Mich. Vols. under my charge, in a sanitary point of view, the improvements taken place, by what means, etc., together with my opinion as regards diet, exercise, disease, etc., which has been the only and necessary result of close observation.

Firstly: This regiment is composed chiefly of young men of good families, of social standing, of education, reared in affluence, and unaccustomed to severe labor. The balance is composed of farmers and farmers' sons, all men of good moral character, and temperate in habit, and generally of excellent physical constitution.

Secondly: They were mustered into the U.S. service at Hillsdale, Mich., on or about the 26th of August last; left for Kentucky almost immediately, and arrived at Covington Sept. 5th; on the 23d Sept. marched from Covington to Snow's Pond, Lexington Pike, Ky., distant fifteen miles; left Oct. 6th for Camp A. J. Smith, distant ten miles; Oct. 10th, left for Camp Wells, Ky., distant eighteen miles; left Oct. 16th, and marched to Camp Jones, eighteen miles; thence on the 19th for Georgetown, Ky., twenty miles; thence on the 21st for Lexington, thirteen miles, at which place the regiment was stationed until Feb. 21st, 1863, at which date it left Lexington for Danville, Ky., distant thirty miles, and remained until the 21st March; then marched to Stanford, thirteen miles, and returned to Danville, March 23d; on the 24th marched to Camp Scott, twelve miles; on the 27th left for Nicholsville, seven miles; the 28th marched to Camp Dick Robinson, six miles; the 29th to Lancaster, seven miles; the 30th marched to Dix River, five miles; thence returned to Lancaster, and marched to Crab Orchard, eighteen miles; 31st left Crab Orchard and marched to Buck Creek, twenty miles; April 1st returned to Crab Orchard, 2d to Stanford, 8th to Danville; 9th left Dansville for Lebanon, arriving on the 10th, twenty-eight miles; 13th, left Lebanon for Nashville, Tenn., by rail, arriving on the 14th, at which place it is still encamped.

I joined the regiment at Lebanon, and found it about to leave for Nashville; had no time to inform myself in regard to its sanitary condition until we arrived here. During the balance of the month of April the number reporting sick daily ranged from forty to sixty cases, consisting principally of diarrhœa, many of them being already chronic, all of which I found to be very difficult to treat so as to afford relief. The rations used by the men at this time were strictly army rations of hard bread and salt pork and beans. The locality in which we were encamped was excellent, free from all miasmatic influence, well policed and cared for. The rations were also invariably extremely well cooked. But notwithstanding the advantages derived from rest, a clean and well located camp, well cooked rations, good tents, etc., I daily found the men becoming less susceptible to the effect of medicines administered, and the number of sick slowly increasing, the diseases also increasing in violence and virulence. Feb. intermittens commenced about May 1st. The first cases were severe. Quinine, as an antiperiodic, was of no value. Being somewhat surprised at the little benefit derived from medical treatment, and thinking I had some latent but powerful influence opposing me, I subjected each man presenting himself on the report to a strict examination, and found that, with very few exceptions, all were suffering from *scorbutic* poison—their systems perfectly infiltrated with it, as it were—so much so, that, if a vesicant was applied, it was most surely followed by erysipelatous inflammation. Scarifying and cupping, the same; and in many cases a peculiar eruption existed, which I presume you have heretofore observed in scorbutic cases. This was the secret force arrayed against the means of cure. I immediately adopted the following course:—1st. Change of food, withdrawing all salt food, beans, and hard bread; fresh soft bread, fresh beef, and corn meal were substituted. The men were daily charged to eat of no grease, and of nothing but the fresh rations, adding vinegar and pepper, together with a few vegetables, which through your influence I was enabled to obtain for them. From this time to the present a very small amount of medicine was used. The same food has been continued in such quantities as we have been able to obtain both from the Commissary and the Sanitary Commission, to whose kindness I acknowledge myself indebted for supplies of potatoes and onions at different times; and am very happy to state to you that now we have less than thirty sick in quarters, the most of whom are at any moment able to don the knapsack, and march, gun in hand, if called upon. No disease assumes a malignant form; medicine now has a happy effect, and the men are jovial and jubilant, instead of being torpid and sluggish. You will notice that corn meal was substituted for beans, and that the substitute is still in use. My reasons are these:—I consider beans the most indigestible of all vegetables, and, if this is true, they, of course, must be the most injurious. The bean, let it be cooked and prepared as it may, ferments in the stomach before it digests, and diarrhœa and an irritated alimentary canal are the necessary results. It also gives to the system a vast amount of carbon, which is not required in the warm climate, nor in any climate or latitude with the thermometer at 90°. The corn meal, on the contrary, is generally grateful to the stomach, gently loosens the bowels, sufficient to maintain them solvent, and thereby prevents the accumulation of irritating substances in the intestines, has as much nutriment as the system requires, can be prepared in so many different ways, and enters so many potages as an ingredient, that it is far more healthy, more convenient, and after a few days eaten as heartily as any class of food ought to be.

My attention was first called to the value of corn as aliment for an army in 1852, '53, '54, and '55, during which time I held the commission of surgeon in the Mexican army. Being most of the time Division Surgeon, I had the opportunities to thoroughly examine the subject, and I can say that I have known seven thousand men on the march for twelve successive days, with no other ration than one quart of parched corn in their haversacks daily, and without there being five sick in the whole division to which I belonged. Scurvy is a disease almost unknown in that army, and I can assure you that corn is, at all times, the principal article of food, and at many times the only one the soldier can obtain.

Again: It is often observed that fresh beef is productive of diarrhœa, dysentery, etc. That this should be, seems to me very strange; and I am led to believe that these diseases are the results of salt grease and bad cooking, and not of the fresh beef. Fried beef (that is beef saturated with rancid pork grease, and half cooked) most undoubtedly will produce not only these diseases, but others which are pathologically blood poisons, but I do not believe that good beef, well boiled, or broiled on the coals, the gridiron, or toaster, ever has or ever will produce any disease, as long as it is used as it should be, and not gormandized.

The price of vegetables has been very high, but now the prices have fallen; vegetables now are abundant and cheap. Will you, Sir, use your influence, to the end that at least four full rations of potatoes can be obtained every week? As a recompense for this service, I will have the men under my charge not only able but willing to do duty at any time, deducting a very small percentage for those diseases which are unavoidable.

I have been far more lengthy than I intended, but I could not conveniently find a stopping-place.

Very respectfully, your obt. servt.,
Chas. L. Southworth,
Surg. 18th Mich. Vols.

Army Medical Intelligence.

EXTRACTS FROM AN ACT TO ALTER AND REGULATE THE NAVY RATION.

Be *it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That the navy ration shall consist of the following daily allowance of provisions to each person: One pound of salt pork, with half a pint of beans or peas: or one pound of salt beef, with half a pound of flour, and two ounces of dried apples, or other dried fruit; or three-quarters of a pound of preserved meat, with half a pound of rice, two ounces of butter, and one ounce of desiccated "mixed vegetables;" or three-quarters of a pound of preserved meat, two ounces of butter, and two ounces of desiccated potato; together with fourteen ounces of biscuit, one-quarter of an ounce of tea, or one ounce of coffee, or cocoa, and two ounces of sugar, and of a weekly allowance of half a pound of pickles, half a pint of molasses, and half a pint of vinegar.

Sec. 2. *And be it further enacted,* That fresh or preserved meat may be substituted for salt beef or pork, and vegetables for the other articles usually issued with the salted meats; allowing one and a quarter pound of fresh or three-quarters of a pound of preserved meat for one pound of salted beef or pork; and regulating the quantity of vegetables so as to equal the value of the articles for which they may be substituted.

Sec. 3. *And be it further enacted,* That should it be necessary to vary the above-described daily allowance, it shalt be lawful to substitute one pound of soft bread, or one pound of flour, or half a pound of rice for fourteen ounces of biscuit; half a pound of rice for half a pint of beans or peas; half a pint of beans or peas for half a pound of rice.

Sec. 4. *And be it further enacted,* That, in case of necessity, the daily allowance of provisions may be diminished or varied by the discretion of the senior officer present in command; but payment shall be made to the persons whose allowance shall be thus diminished, according to the scale of prices which is or may be established for the same; but a commander who shall thus make a diminution or variation shall report to his commanding officer, or to the Navy Department, the necessity for the same, and give to the paymaster written orders specifying particularly the diminution or reduction which is to be made.

Sec. 6. *And be it further enacted,* That the provisions of this act shall go into effect in the United States on the first day of the succeeding quarter after it becomes a law; and in vessels abroad on the first day of the succeeding quarter after its official receipt; that any acts and parts of acts which may be contrary to or inconsistent with the provisions of this act shall be and are hereby repealed.

Sec. 7. *And be it further enacted*, That the Secretary of the Navy be authorized to procure the preserved meats, pickles, butter, and desiccated vegetables in such manner and under such restrictions and guarantees as in his opinion will best insure the good quality of said articles.

Approved July 18, 1861.

From the Naval Appropriation Bill, Approved July 14, 1862.—Sec. 4. *And be it further enacted*, That from and after the first day of September, eighteen hundred and sixty-two, the spirit ration in the Navy of the United States shall for ever cease, and thereafter no distilled spirituous liquors shall be admitted on board of vessels-of-war except as medical stores, and upon the order and under the control of the medical officers of such vessels, and to be used only for medical purposes. From and after the said first day of September next there shall be allowed and paid to each person in the navy now entitled to the spirit ration five cents per day in commutation and lieu thereof, which shall be in addition to their present pay.

General Order.—From and after the first day of September next, the law allows *five cents per day* to each person in the navy, now entitled to the spirit ration, in commutation and lieu thereof, which shall be in addition to their present pay.

Pay officers will credit this allowance on their rolls, under the separate head of "undrawn spirits," to each person on board ship entitled to a ration, and at the end of each quarter will pay the amount due, to such of the crew and marines as may elect to receive it. If any person shall decline to receive such payment, it must remain to his credit on the books of the ship and be accounted for in the same manner as other pay.

The commutation price of the navy ration will continue to be twenty-five cents, without reference to the five cents allowed as above mentioned.

Gideon Welles.

Navy Department, July 29, 1862.

(CIRCULAR.)

Navy Department,
Bureau of Provisions and Clothing.
June 11, 1863.

1. When vessels of the Navy have on board a sufficient supply of tomatoes, the Commanding Officer, if he deems it advisable, may direct the same to be issued to the crew in lieu of flour, rice, dried fruit, pickles, desiccated mixed vegetables or beans, but not oftener than twice in each week. Four ounces of tomatoes will be issued in lieu of eight ounces of flour, or four ounces of rice, or two ounces of dried fruit, or four ounces of pickles, or one ounce of desiccated mixed vegetables, or half a pint of beans.

2. Preserved tomatoes may also, with the consent of the Commanding Officer, be issued to officers and crew at eight cents per pound, and charged to them as cash: the amount to be credited by the Pay Officer to the appropriation for "Provisions."

3. Where potatoes, onions, or other fresh vegetables are sent out in quantities greater than are necessary for use with the fresh meat issued, the Commanding Officer may, at his discretion, allow the officers and crew to draw a reasonable quantity of the vegetables for each mess, and be charged for the same as cash, estimating the Irish potatoes and onions at one dollar per bushel, and turnips and carrots at half that price; the amount to be credited by the Pay Officer to the appropriation for "Provisions." If other vegetables or fruit be sent, they will be charged at invoice prices.

4. The Commander and Pay Officer of supply or store vessels will take care that no vessel shall receive an undue proportion of their whole cargo.

H. Bridge,
Chief of Bureau.

To the Commanding Officers and Pay Officers
Of U.S. Ships of War.

(CIRCULAR NO. 12.)

Surgeon-General's Office,
Washington City, D. C., July 29, 1863.

The attention of Medical Officers is called to the virtues of Permanganate of Potassa as a disinfectant and deodorizer.

A preparation of this salt in solution is supplied by the Medical Department. Medical Officers are directed to make proper requisitions therefor upon Medical Purveyors whenever its use may be indicated; and Medical Purveyors and Storekeepers are directed to keep a stock on hand by making timely requisition on this Office.

WM. A. HAMMOND,
Surgeon-General.

ORDERS, CHANGES, &c.

Assistant-Surgeon R. L. Braden, U.S.V., has become insane, and been committed to the Government Asylum for the Insane, at Washington, D.C.

Assistant-Surgeon W. G. Moore, 61st Ohio Vols., was mortally wounded while attending to his duties in rear of his regiment at the battle of Gettysburg, July 3, 1863, by a cannon-ball, which took effect in his left thigh, lacerating and contusing it extensively from the gluteal region to the knee. The femur was not broken nor the femoral artery divided. Reaction, however, did not succeed the severe shock, and he died on the sixth of July, the whole limb being in a state of mortification or gangrene, which extended to the gluteal, scrotal, and iliac regions.

Surgeon G. L. Sutton, U.S.V., has been relieved from General Abercrombie's Staff, and assigned to duty as member of the Board for the examination of candidates for the Invalid Corps, at Camp Distribution, near Alexandria, Va.

Surgeon S. J. W. Mintzer, U.S.V., has been assigned to duty in charge of General Hospital, at McMinnville, Tenn.

Surgeon W. Clendenin, U.S.V., has been placed in charge of the General Field-Hospital, at Decherd, Tenn.

Surgeon A. M. Speer, U.S.V., is at Pittsburg, Penn., on twenty days' leave.

Surgeon John Neil, U.S.V., is Medical Director to General W. F. Smith's command, at Hagerstown, Md.

Surgeon E. W. Thurm, U.S.V., who has been sick in the General Hospital, at Fairfax Seminary, Va., for some weeks past, has returned to the Army of the Potomac, and resumed his duties with the 11th Army Corps.

Surgeon R. A. Christian, U.S.V., has been relieved from duty attending officers and soldiers in the city of San Francisco, Cal., and assigned to duty at the Headquarters District of Oregon, Fort Vancouver, W. T., as Medical Director of that District.

By command of the President, Assistant-Surgeon Charles Woodward, 26th Illinois Vols, has been dismissed the service of the United States for uttering disloyal sentiments.

Surgeon H. J. Churchman, U.S.V., having reported for duty from sick leave, has been ordered by the Assistant Surgeon-General at St. Louis to report to Major-General Grant at Vicksburg, Miss.

Assistant-Surgeon J. D. Johnson, U.S.V., has been assigned to duty at Camp Bradford, near Baltimore, Md.

Assistant-Surgeon W. C. Bennett, U.S.V., having reported at Headquarters Army of the Potomac, has been assigned to duty as Medical Inspector of the 12th Army Corps.

Assistant-Surgeon A. C. Van Duyn, U.S.V., has been assigned to the charge of the General Hospital, at Fort Scott, Kansas.

Surgeon Bernard Beust, U.S.V., has been assigned as Surgeon-in-Chief to the 1st Division, 11th Army Corps, Army of the Potomac.

Surgeon E. D. Kittoe, U.S.V., has been placed in charge of the Confederate hospitals, at Vicksburg, Miss.

Leave of absence is granted to the following named medical officer, on surgeon's certificate of disability:

Assistant-Surgeon Joseph L. Cutler, 134th New York Vols., for twenty days.

Surgeon William Arnold, 37th Ohio Vols., is hereby mustered out of the service of the U.S., to date January 6, 1863, the date of his muster in, he having rendered no service to the Government.

Surgeon L. A. Edwards, U.S.A., and Capt. W. Silvey, 1st U.S. Artillery, Assist. to the Provost Marshal General of the United States for the State of Rhode Island, are hereby directed to proceed to Lovell Hospital, Portsmouth Grove, R. I., and there organize fit subjects for the Invalid Corps under the instructions of the Provost Marshal General.

The following officer will at once proceed to Wilmington, Delaware, and report for examination to Major-General Irvin McDowell, President of the Retiring Board, convened by S. O. 307, current series, from this Office.

Surgeon Madison Mills, U.S.A.

Private John W. Ehrman, Co. E, 1st Illinois Light Artillery, is hereby honorably discharged the service of the U.S., with a view to his enlistment as hospital steward, U.S.A.

By direction of the President, the following appointment is hereby made in the 2d Regt., District of Columbia Vols.

Assistant-Surgeon W. O. Baldwin, to be Surgeon, vice Keasbey resigned.

Leave of absence is granted the following named officer on surgeon's certificate of disability:

Chaplain J. C. Smith, U.S.A., for twelve days.

Assistant-Surgeon E. B. Zule, 2d Iowa Cavalry, is hereby discharged the service of the U.S., on account of incompetency.

The following officer, having tendered his resignation, is hereby honorably discharged the service of the United States on account of physical disability:

Surgeon Wm. T. Black, 1st Louisiana Vols., upon condition that he receives no final pay, until he furnishes evidence of service from January 1st, 1863, to the present day, no rolls of this regiment having been received at this office since December, 1862.

The Military Governor of the District of Columbia is authorized to discharge non-commissioned Officers and Privates who are confined in hospitals in the District of Columbia, on surgeon's certificate of disability, conformably to existing orders, notwithstanding charges of desertion are pending against them, and on summary examination to remit the charge of desertion in his discretion. In case the charge of desertion is not so remitted, the certificate of discharge shall have written thereon, "pay account suspended on charge of desertion."

Original Lectures.

DISEASES OF THE RESPIRATORY ORGANS IN CHILDREN.

BEING A COURSE OF LECTURES PREPARED FOR DELIVERY DURING THE SPRING SESSION OF 1862 IN THE COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.

BY THE LATE
C. VAN ALEN ANDERSON, M.D.,
PHYSICIAN TO CHILDREN'S DEPARTMENT, DEMILT DISPENSARY, N. Y.

LECTURE V.—PART II.

DIPHTHERIA, CONTINUED, AND TREATMENT.—SPASM OF THE GLOTTIS.

In treating the disease itself, remember that your patient is likely to die from apnœa, produced either by the spasmodic closure of the glottis, or by the obstruction arising from the presence of the false membrane. Your treatment, therefore, is to be calculated to meet both the spasmodic and the mechanical elements of the danger. In the first stage, and before we have reason to suspect the existence of pseudo-membrane, I recommended you to adopt some plan of treatment which will more particularly cause the nervous symptoms to subside. Open the bowels by a rapid and efficient purgative—where there is much heat of skin the saline ones are preferable—act on the cutaneous system by warm baths, and administer musk or other antispasmodics by the mouth or in the form of injections. If the hissing inspiration and ringing cough, together with the fits of dyspnœa, have appeared before your visit, I believe that the application of the hot sponges, after the manner of Dr. Graves, will prove of great advantage, for I am convinced that I saved one case last winter by their use; at any rate it is a remedy that can do no harm in its trial, and that is worthy of more attention than has been given to it. If you do not check the disorder by these means, do not hesitate to make your patient vomit frequently; not because emetics exercise any specific influence against the disease, but because they are not only powerful and safe expectorants, and also because they act beneficially on the skin and on the organs of circulation. Unless the child is exceedingly vigorous and robust, and the sthenic action of the disease extraordinarily marked, avoid carefully the use of antimony, but depend upon ipecac, which is perfectly safe, or upon the sulphates of copper or zinc, which can produce no harm if judiciously managed. Stimulating expectorants—such as that mentioned by Dr. West, consisting of decoction of senega, carbonate of ammonia, and tincture of squill—are of great value in all stages of the complaint.

Supposing that your patient, having been through such a course of medication, instead of mending, advance from bad to worse—the cough is more smothered, the hissing respiration more frequent, and the paroxysms of dyspnœa more intense—in fact, you begin to suspect the existence of false membrane somewhere in the larynx. By avoiding the depression of his system, you have husbanded his strength; nay, you have done more, for you have saved him from consecutive bronchitis or pneumonia, which, I believe in the majority of cases, are the direct consequences of the old plan of treatment. Your object is still to prevent his dying of apnœa; your emetics and expectorants are of no avail; you have one resource left—tracheotomy. Do not wait until the last stage, when it is almost impossible to rally the exhausted vital powers, but operate early while your patient is still in good condition. The operation itself, if properly performed, is perfectly simple and easy, it is followed by no bad effect, and it gives the inflamed larynx that perfect rest which is one of the most satisfactory elements in our treatment of inflammations of other parts of the body. Do not look upon tracheotomy as the very last resort in the treatment of croup, and therefore only to be used when death has already claimed his victim, but rather regard it as one of your most efficient means of cure if it only be performed at the proper time. The details of the operation I need not dwell upon, I only wish to impress on your minds its importance in uncomplicated cases.

The bronchitis and pneumonia which complicate the disease will require, in addition to the measures enumerated, counter-irritation over the chest, and an early resort to stimulants. Let it be your object to keep your patient alive, and give nature time to exert her healing powers. Tracheotomy should, of course, be avoided when there is also trouble in the pulmonary tissue. Stimulants, tonics, and the chlorate of potassa, are indicated both in diphtheritic croup and that which appears during scarlatina. I have frequently referred to the spasmodic element of true croup as forming one of its dangers; you will, therefore, easily appreciate the importance of an acquaintance with that disorder, for which the name of phæno-glottism has been proposed, but which is more commonly known as spasm of the glottis.

Previously to the year 1830 this affection does not seem to have been distinctly recognised, although monographs on the subject were from time to time published by English physicians, and by Dr. Rush, of Philadelphia, who published two essays—one in 1770, and another in 1809. Nearly all the writers of that period considered it a convulsive disease, but many of them confounded it with that form of croup in which the nervous symptoms predominate. But Dr. Kopp, a German author, from whom it has acquired the title of Kopp's Asthma, wrote an elaborate treatise on the disease, in which he propounded the idea that it depended upon hypertrophy of the thymus gland; and other German writers, following in Kopp's footsteps, gave the results of various post-mortems, by which they considered that their views were established. This produced both a fuller investigation of the subject and numerous emphatic denials of the truth of Kopp's theories and deductions; and among many good and valid objections, it was clearly established that cases of spasm of the glottis are frequent in which no hypertrophy whatever of the thymus can be detected. While this controversy was going on in Germany, various and different opinions began to prevail in England, some physicians considering the disorder as purely convulsive in its nature, others regarding it as dependent on a variety of local lesions. It is, however, to the French that we owe most of our knowledge of this complaint. In 1845, M. Trousseau showed conclusively that spasm of the glottis is a convulsive disease; and his work was shortly followed by the very remarkable treatise of Dr. Hérard, in which the history of the disorder is traced in its minutest details. He studied the condition of the thymus, the cervical glands, the heart, the brain, and the spinal cord, not only in children who died from spasm of the glottis, but also in those who died of other diseases, and demolished the theory of Kopp by showing that the thymus is an organ of variable size, and that its greater or less development has no appreciable effect upon spasm of the glottis. Dr. Reid, however, published a work on the subject, which, with the notes added to it in 1850 by Dr. Lorent, of Bremen, furnishes the most complete information that we possess. Dr. Reid supported his descriptions by facts observed in a large practice, twenty-six of the fifty cases which he printed being reported with extreme accuracy. The disease shows itself during various conditions of the system—sometimes in perfect health, sometimes in the course of dentition, sometimes during or in the convalescence from different acute and chronic disorders. There are no precursory symptoms, but the child is suddenly seized with a fit of convulsive suffocation, resulting from a spasmodic closure of the rima glottidis; respiration is suspended, the head is thrown back, the eyeballs protrude, the mouth is widely opened, the face is injected, the child is agitated, and sometimes carries his hands to his throat with the peculiar gesture that is observed in croup. This apnœa seldom lasts more than half a minute or a minute; it is nearly always the initial phenomenon of the attack, and is followed by one or more short, sharp, hissing inspirations, or by one loud, crowing inspiration, like the hoop in hooping-cough. At the same time there is a remarkable spasm of the thumbs and great toes; the limbs stiffen, the thumb is thrown across the palm of the hand, the toes are bent towards the sole of the foot, and both wrists and feet are contracted inwards and downwards. Most of the other functions of the system experience transient derangement: the pulse becomes small and accelerated, the action of the heart is tumultuous and irregular, the veins of the neck and face dilate, the skin is covered with a cold moisture, there are involuntary evacuations, the walls of the chest are immovable, and, if auscultation be practised, the respiratory murmur is inaudible.

These symptoms disappear nearly as quickly as they have come on. The inspirations become longer and lose their hissing character, the limbs relax, the hands and feet reassuming their natural position, the face regains its color, and after a fit of crying the child, exhausted by such an alarming and violent seizure, falls asleep.

These convulsions vary somewhat according as the apnœa or the hissing or crowing inspirations are more or less marked, or exist alone. Sometimes the face is flushed, sometimes it is pale, sometimes the suffocation is more intense than at others, but one single spasm never lasts more than one or two minutes, though Barthez and Rilliet mention the case of a child who died of spasm of the glottis, a single convulsion continuing, as the parents assured them, during two hours; upon which they gravely and justly remark, "The gravity of the symptoms, and the consternation which they caused, permit us to suppose that the length of time was exaggerated, or rather that a single fit was confounded with a series of connected attacks." If the infant is strong, and the attack has not been violent, the return to the normal state is complete; if it has been intense, and the child is ill or of a feeble constitution, it remains for a long time pale and sad.

The spasms return at variable and unequal intervals. They may be repeated fifteen or twenty times in the twenty-four hours, or they may be absent for weeks or even months. Very rarely there is but one convulsion, which never returns; or else, in other cases, there is a kind of a crisis, consisting of several, appearing one after another during several hours, and going away to come on again at a remote interval. Generally the child is seized with short spasms which are separated by several days. Their brevity, the length of the interval, and the slight influence they exercise upon the general health, do not alarm the parents. At the end of a variable time, however, they approach together. They take place every day, then several times in the day. The child's constitution suffers, as is shown by his growing pale and thin; one spasm more violent than the others carries him off, or, debilitated and depressed by their rapid succession, he fairly pines away.

Fortunately this is not always the history of this disease. The spasms, coming on lightly at first, gradually grow in frequency and intensity, then, decreasing, lengthen themselves out, and the malady terminates in recovery. We may, therefore, properly enough recognise three stages—of augmentation, development, and decline—and in most cases it is in the first of these that the termination by death occurs. Spasm of the glottis is a disorder of very early life, attacking children who have not passed their second year. It has been known to occur in the very first days of an infant's life, carrying him off in the course of six weeks, and cases of it after the age of two years are rare and exceptional. Curiously enough boys are much more liable to it than girls, though why it should be so is more than I can tell you. Nervous children who are continually in motion seem to be predisposed to it, though it is found not only in these, and in infants who suffer from rachitis or any other peculiar diathesis, but also in strong and healthy constitutions. It is developed by preference in the winter—usually from October to March. Cold seems, indeed, to have a great influence over it, for, while frequent in northern countries, it is comparatively rare in southern ones. Dr. Kerr remarks, that there are more cases when the wind is either north-east or north-west than at any other time. The most common of the predisposing and exciting causes, however, is the process of dentition. At this period, you know, great changes are going on in the animal economy, and children are exposed to a great variety of disorders; we are not, therefore, entitled to consider spasm of the glottis as depending on the penetration of the gum by the teeth, but we should rather believe that the organism being in a condition of great and unusual activity, its parts are therefore more likely to get out of order. Unfavorable hygienic circumstances, such as impure air, early weaning, and improper food, rank among the predisposing causes. In some cases there is an apparent want of any exciting cause whatever. The spasm may seize the child during the most tranquil slumber, or while it is reposing calmly in the arms of its nurse or mother. At other times the slightest cause may give rise to the attack of suffocation—such as the noise made by rubbing an article upon a table, the effort of deglutition, overfeeding, constipation, rage, laughter, fright, and moral emotions of all sorts. Barthez and Rilliet say that they have often produced the convulsion in depressing the tongue with a spatula, and were alarmed by the expression of the face and by the apnœa, evidently the results of a violent contraction of the respiratory muscles.

You will have observed from the description that I have given you that the peculiar symptoms of spasm of the glottis are, a sudden attack of suffocation followed by a crowing inspiration, not having any precursory symptoms, and not accompanied by cough. When you have once witnessed it, you cannot very well confound it with any other disease.

It is distinguished from croup by the permanency of dyspnœa in the latter malady, as well as by the hoarse and characteristic cough, the rough metallic sound of croupy breathing, the continuity of the symptoms with their disposition to exacerbations and remissions, the decided febrile movement, and the occasional expectoration of false membranes. None of these symptoms are observed in spasm of the glottis, but, on the contrary, the interval is distinguished by healthy respiration, there is no cough, no fever, no expectoration of false membranes, but there is always a tendency to the supervention of general convulsions. It cannot well be mistaken for hooping-cough, for the sudden suffocation and absence of cough distinguish it clearly from a disease accompanied by a convulsive cough, expectoration, and vomiting. Yet it is fair to remark that the crowing inspiration of the one, and the hoop of the other, are very nearly alike in sound, a semblance easily accounted for when we remember that they spring from the same cause, viz. a more or less perfect closure of the glottis, succeeded by a protracted inspiration.

There is a kind of infantile asthma which may be confounded with it, resulting from compression of the trachea or of the pneumogastric nerves by tumors of different sorts, as occurs, for instance, in tubercular deposit in the bronchial glands. They are known apart, however, by the form and length of the fits of apnœa in the case of abnormal tumors, by the cough, and by the persistence of several symptoms in the interval, making a sufficient distinction from spasm of the glottis. We may have, however, in newly born children, both of these diseases existing at the same time.

When the attack is sufficiently severe to require the services of the physician, the prognosis is at least doubtful. Dr. Cheyne lost one-third of his cases; in the cases of Dr. Hirsch three out of five died; MM. Barthez and Rilliet report that they cured one in nine, and Dr. Hérard one in seven. Out of 289 instances of the complaint collected by Dr. Reid and his German translator, 115 died, making a mortality of forty per cent. If, however, we remember that there are many seizures so slight and imperfect as never to come under the notice of the profession, we may perhaps be allowed somewhat to reduce our estimate of the fatality of spasm of the glottis. The circumstances which indicate a favorable termination are:—1st. A brief attack limited to a few hissing inspirations; 2d. The preservation of the natural color of the face; 3d. The lengthening of the intervals between the attacks; 4th. A good constitution; and 5th. Proper hygienic circumstances. On the other hand, those which point to an adverse result are:—Protraction and intensity of the seizures, lividity or ghastliness of the countenance, increase and rapid repetition of the spasms, and general convulsions.

Since the time of Dr. Kopp many and conflicting opinions have prevailed as to the pathology of this disease. That physician attributed it to hypertrophy of the thymus gland, but his theory has been clearly proved to be untenable. Other writers have considered that the seat of irritation may be at the nervous centres, or at the origin of the pneumogastrics; and others again refer it to the suspension of the functions of that portion of the eighth pair which is distributed to the larynx. The discovery by Dr. Marshall Hall, however, of the reflex functions of the spinal cord, threw great light upon the true nature of the disorder, and we now consider it the consequence of excitement of the reflex system originating in various organs of the body.

In all uncomplicated cases we find upon dissection no appreciable lesions, with the exception of various alterations which are consequent upon, and not the causes of the spasm of the glottis. Among these secondary changes the most common one is pulmonary emphysema, which was observed in all Dr. Hérard's cases. In the heart we shall probably discover a quantity of liquid venous blood; and there may be more or less serous effusion beneath the arachnoid, accompanied with some congestion of the cerebral substance.

We may, therefore, draw this conclusion, both from the symptoms of the disorder and from the absence of any special post-mortem alterations, that it is a convulsive disease arising from want of harmony in the action of the different respiratory muscles. What causes this condition of things we cannot tell—it is a problem reserved for our successors in future ages, who shall have the means of investigating the profound chemical and vital phenomena that produce all deviations from the standard of health.

In our treatment our first object is to guard against the accession of spasm of the glottis. We should be careful that the child is properly fed, that it respires a sufficient amount of pure air, that cleanliness is strictly attended to, that it is wisely clothed, and that the bowels are regulated. During the course of dentition the state of the mouth will require particular consideration, and all heat and tumefaction of the gums should be removed by frequent and free use of the lancet. Dr. Marshall Hall even goes so far as to say that the gums should be lanced every day.

During the access of the spasm, although we cannot do much, still we can effect something. At the moment that the child is seized it should be raised up, so that it may be able to employ all its efforts in respiration. Cold water should be dashed upon the face, the feet should be bathed in warm water, to which mustard or Cayenne pepper may be added, and smart friction of the limbs with some liniment containing ammonia will be useful. If these means are of no avail, resort instantly to the inhalation of ether or chloroform, which is beyond doubt a remedy of extreme importance.

During the interval, if the child is not robust and healthy, you will insist upon proper hygienic treatment, and will administer cod-liver oil as a tonic, together with some of the antispasmodics, such as valerian, musk, the oxide of zinc, or assafœtida. Change of air also is indicated, and will often surprise you by its beneficial effects. If these means fail, you may increase your doses of the antispasmodic, and may try some of the alterants, such as calomel, or the iodide of potassium; if, however, the spasms approach more closely together, and the face be congested, the child being otherwise of good constitution, apply one or two leeches behind the ears, and use warm baths, sinapisms, and frictions with stimulating liniments; but in all cases rely upon antispasmodics, tonics, and proper food. Remember that your patient may die of spasmodic suffocation: do all that you can in every way to prevent it; do not mistake the disease for croup, and imagine that you have an acute inflammation to deal with; do not underrate the danger that the child is exposed to because the first attack is slight, for you never can know how severe the succeeding ones may be. And finally, gentlemen, let me impress most earnestly upon you the great necessity and importance of two things—first, of prompt and early medical assistance; and secondly, of close attention to the sanitary condition of a child who suffers from spasm of the glottis.

Original Communications.

ANTERIOR SINGLE FLAP AMPUTATION.

By WILLIAM HENRY CHURCH, Surg. U.S.V.,

MEDICAL DIRECTOR, DEPARTMENT OF THE OHIO.

More than two years ago, at Bellevue Hospital, I amputated a thigh by what might be called the anterior single flap method. That patient did so well that, upon entering the army, I induced others to assist me in giving the method a more thorough trial, and subsequent experience has been so favorable that I have determined to submit a description of the operation for publication. Having grasped as much of the soft parts as can be held by the left hand, a catling is passed through above the bone, carefully avoiding the principal artery, nerve, and vein. A superior flap is made by cutting downwards and upwards, its length being little less than one-third the circumference of the limb, *i.e.* if the limb is fifteen inches in circumference, the flap should not be more than five inches in length.

The flap being drawn back by an assistant, the remaining soft parts on the lower part of the thigh are divided down to the bone by one sweep of the knife at right angles with the shaft of the bone, as in the circular operation, it only remaining to saw through the bone to complete the amputation.

The parts are brought together with sutures and adhesive straps, and the stump covered with a light or cold-water dressing.

The supposed advantages of this operation are:—

That, when in coaptation, the cut surfaces are confined to the lower half of the limb.

From the above fact the fluids more easily escape.

The vessels and nerves are divided transversely, and cannot be drawn over the end of the bone.

The bone is not so apt to protrude.

The cicatrix does not come near the end of the bone, which is covered by a thick cushion of muscles and other soft tissues.

The stump is better adapted to the purposes of an artificial limb. I never have yet seen any portion of the flap slough.

For about thirty-six hours after amputation the discharge is very profuse, when it almost entirely ceases.

Should the above assertions prove correct, there is every reason to hope for a more speedy recovery through union by first intention than in either the double flap or circular operation.

The leg may be amputated by dissecting up the anterior flap, when the operation is completed in the same manner as with the thigh.

Cincinnati, O.

ON THE TREATMENT OF FRACTURES OF THE LEG.

BY A MODIFICATION OF POTT'S SPLINT, WITH CASES.

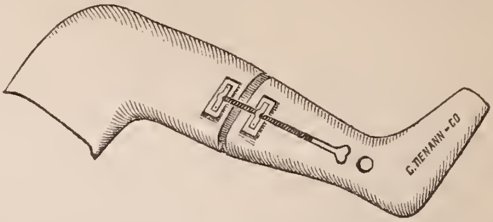
By H. RAPHAEL, M.D.,
HOUSE-SURGEON, BELLEVUE HOSPITAL.

It is now a well established fact that, in all forms of fracture, especially in long bones, the position in which the injured limb is to be placed is of great importance. It has long been taught that extension and counter-extension ought to be applied in fractures of long bones in their long axis, without any regard being paid to the anatomical arrangement of the muscles surrounding the limb.

That any set or class of muscles may by proper management be converted into an auxiliary power in maintaining the ends of a broken bone in apposition, and, on the other hand, by irritation or the like be thrown into convulsive action, is well known; and that the muscles, normally performing the duty of extensors and flexors, may, by irritation of the ends of a fractured bone, act on the fragments, and tend to displace them, is also acknowledged by all. This holds good in almost all fractures of long bones, but in fractures of the thigh and leg, especially when they are usually oblique, these phenomena can be best observed. Every one is convinced how perfectly useless it is to apply a power for the purpose of overcoming an irritated muscle as long as the stimulus exists which constantly urges the muscles into action.

The study of the anatomical arrangement of the muscles of the leg cannot fail to convince us that the application of extension can be of little service when applied in the long axis of a limb placed in a horizontal position; for the very attempt at placing the limb in an extended position places the muscles in a state of tension, and gives them an opportunity of exerting their greatest power of action and resistance. But relax these muscles, and they become incapable of acting on and displacing the ends of the bone, because the muscles themselves, when in a state of laxity, are less likely to be irritated by the fragments. Then, again, the patient will thereby be spared a good deal of pain, and the surgeon will encounter fewer difficulties in reducing the overlapped ends of the broken bone.

Another and equally grave objection to the method of treating fractures of the leg in the extended position is ulceration of the heel, so liable to follow when the leg is allowed to rest on the calf and heel for any length of time. And the tendency of the toes to eversion or inversion when the foot rests on the heel, and subsequently uniting with deformity, these, and many other difficulties, are wholly obviated by placing the limb in the position, and using the splint recommended and practised by Pott. I can use no better language in attempting to recommend this splint than by quoting Dr. Hamilton's remarks on it in the treatment of fractures of the leg. "Without being able, in a case which presents so many forms and complications, to establish any rule of universal application, I nevertheless do not hesitate, after considerable experience, in declaring a plan of treatment which, in my opinion, ought to be adopted with only occasional exceptions, that is, I mean to say, in simple fractures. The plan of treatment to which we chose to give so general a preference is well known as that recommended by Pott, the distinguished surgeon of St. Bartholomew's Hospital, and with only slight modifications it will be found applicable to probably nine-tenths of all simple fractures of the leg, and to some of the compound fractures." The advantages this splint has over other appliances are obvious; as the muscles of the leg are relaxed, extension is more easily applicable; while the leg lies on its outside there is no pressure on the heel, obviating the dangers of ulceration, and the foot is less likely to rotate inwards or outwards. And having used this splint in several cases with the utmost satisfaction, it occurred to me that some improvements might be made on the original in the way of an extension apparatus. This has been fully accomplished by making the splint in two parts or halves, with an endless screw attached to them, as seen in the woodcut. The splint is well padded to fit the irregularities of the limb, is placed on the outside of the leg, the thigh slightly flexed on the body, and the leg on the thigh. In this position the upper portion of the splint is fastened either with adhesive plaster or a roller to the thigh and upper part of the leg, while the lower half is secured to the foot and to that portion of the leg below the fracture. Extension is now made by a few turns of the screw, which causes the two portions of the splint to recede from each other, by which means the ends of the overlapped fragments are easily reduced.



I think we may dispense with the inside splint as originally used by Mr. Pott, by making the splint hollowed out or grooved, so as to encircle the limb about one-half its thickness. I will conclude by giving the histories of some of the cases treated with this apparatus, hoping that the final results obtained by it will induce others to try it.

Case I.—Paul Tomlinson was admitted Jan. 10th with a comminuted fracture of both bones of the right leg. There was great overriding of the fragments and considerable swelling. By the fifth day the swelling had subsided, the leg was placed on the splint, and secured by a roller. And as the swelling rapidly subsided the dressings were tightened, without, however, removing the limb from the splint and displacing the fragments. This splint with extension was kept on to Feb. 5th, when it was removed and a pasteboard splint substituted, the bones being found to have united. This patient was discharged Feb. 20th without the slightest sign to show the point of the fracture.

Case II.—T. G——, admitted Feb. 28th with an oblique fracture of the tibia and fibula at the junction of the middle and lower third. As there was but little swelling on his admission the limb was put upon this splint, and secured with adhesive plaster above and below, and evaporating lotions were applied at the point of injury. This splint with extension was kept up to March 25th, when the fracture was found to be united, and the leg was put in a pasteboard splint. Patient left on the tenth of April.

Case III.—C. McB—— was admitted with an oblique fracture of both bones of the right leg in its middle third, the result of direct violence by a heavy plank board falling on his leg. By the time he was admitted into this hospital the leg was considerably swollen and inflamed, which prevented the immediate application of splints. By the fifth day the swelling had diminished to such an extent that the limb could with propriety be put up. The limb was placed on its outside, and secured to the splint, which was retained for twenty-six days. At that time the overlapped ends of the fracture were completely reduced, and union had taken place. Pasteboard splints were now applied, and the patient left the institution two weeks after.

Case IV.—T. S—— was admitted May 9th with a fracture of both bones of the left leg. The site of fracture in this case was most unusual. The tibia was broken at not more than three-fourths of an inch above the ankle-joint; the fibula about half an inch higher. This case was no less difficult to treat than it was remarkable in point of fracture. As the muscles of the calf of the leg contracted they drew the heel backwards, which caused the lower fragment to bulge out in front to the height of an inch, simulating a backward dislocation of the tibia or fibula from the astragalus. The fracture-box, double and single inclined planes, were successively tried with pressure on the lower fragment in front and on the upper behind. But the deformity was only increased by the repeated attempts at placing the limb in an extended position. At the suggestion of Dr. Smith, Pott's splint was substituted, with the leg placed in a position that completely relaxed the muscles of the leg, and at the end of three days the displacement was reduced to such an extent that only a projection of not more then one or two lines showed the site of the previous deformity. The bones have now united with no more deformity than that just mentioned.

These cases have been examined by some of our most distinguished surgeons, who expressed their entire satisfaction with the result thus obtained.

Bellevue Hospital, June, 1863.

FOREIGN BODY IN THE AUDITORY CANAL.

By D. B. ST. JOHN ROOSA, M.D.

NEW YORK.

A soldier standing guard before the hospital-tent of a regiment, suddenly felt an insect passing into his ear, and a sensation of pain, causing vertigo, and compelling him to be relieved from his duty. On examination of the ear, as well as the imperfect means allowed, no aural speculum or sunlight being at hand, the presence of a small bug was thought to be ascertained. This was done by one of the hospital attendants, and he attempted to remove it by means of forceps and other dangerous implements. Only more pain was caused, when I was sent for, and ordered the ear to be syringed for fifteen minutes with warm water. This relieved the pain, and the insect was thought to be removed; but as the operations were carried on by the light of one candle, it was somewhat difficult to decide certainly. External otitis resulting from the lodgment of the insect, it was treated by applications of warm water to the auditory canal and membrana tympani; during the acute stages, by counter irritation over mastoid process, and later on, with a mild lotion of plumb. acetat. applied to the membrana tympani. Ten days after the supposed lodgment of the insect, during one of the applications of warm water by means of a syringe, the bug, as it proved to be, passed out, of course long since dead. A slight otorrhœa existing, and the patient having also an ulcer of the leg, on the moving forward of the regiment, I was obliged to leave him at a General Hospital, and hence lost sight of the case.

This case is unsatisfactory from various reasons. The absence of aural specula, which should be in each regimental instrument-case, and my inability to get one made to answer the purpose, prevented a full examination of the auditory canal at the beginning of the case, the only possible time for a satisfactory one, the subsequent external otitis preventing any certain diagnosis as to the presence of the bug.

The application of the forceps to attempt its removal was decidedly wrong, for that instrument should very rarely, if ever, be introduced into the ear for the removal of foreign bodies. Its use is almost certain to excite inflammation, and that of a dangerous character. We should beware of probes, forceps, *et id genus omne*, in our treatment of the ear.

The application of warm water, filling the external ear completely with it at frequent intervals, I consider, with the aid of leeches applied on the tragus in extremely acute cases, the very best alleviator of the terrible pain which is one of the evidences of acute otitis. It is much to be preferred to the application of poultices, which are more apt to lead to such relaxation of the parts as to cause suppuration, and is more convenient and clear. As far as I know Dr. V. Troltsch, of Wurzburg, Germany, was the first to recommend this remedy as particularly adapted to quieting pain in the ear.

The application of a steady and comparatively large stream of water is the only certain and safe way of removing foreign bodies, such as peas, beans, buttons, insects, which may be inserted or find their way into the ear.

83 East 22d Street.

Progress of Medical Science.

PREPARED BY E. H. JANES, M. D.

AN ESTIMATE OF THE EXTENT TO WHICH HUMAN LIFE HAS BEEN PROLONGED OR ABRIDGED BY OVARIOTOMY,

Was recently the subject for discussion in the Royal Medical and Chirurgical Society of London, introduced by Dr. Robert Lee, who examined the tables published by Dr. Clay in 1860, comprising 567 cases, of which 242 were considered successful, 235 died from the direct effects of the operation, leaving 90 cases concerning which no information is furnished whether life was prolonged or abridged. From this analysis, and the number of unpublished unsuccessful cases he has succeeded in collecting, Dr. Lee "considers it demonstrated that ovariotomy is an unjustifiable operation where the life of the patient is not in immediate danger, and where there is not a great probability of the life of the patient being saved by the removal of the disase." He further stated that his attention had been early called to this subject by a fatal case in which a fibrous tumor of the uterus had been mistaken for a tumor of the ovarium, and removed. He had carefully examined every case of ovarian disease that came under his observation, the result of which was that he believed it impossible in any case to determine before actually laying open the abdomen what the condition of the viscera was, and hence it was not justifiable to perform such a dangerous operation at a venture.

Mr. Macilwain thought more accuracy in diagnosis was wanted, that the disease should be studied from the laws of general pathology, and that the danger of removing the ovary had been exaggerated. He agreed with Mr. Spencer Wells that the after-treatment, repose, was the Alpha and Omega. Mr. W. had given him the addresses of twelve patients on whom he had operated, ten of whom he had seen, one a young woman from whom Mr. W. had removed a tumor weighing forty pounds, and who was now, with the other nine, quite well. From this he felt convinced that the question of ovariotomy was worthy of most serious consideration, and should not be the subject of mere hostile interchange of opinions; that the facts required could not be gathered by a single person, however large his experience, but that by vigorous action of the Society enough facts might be accumulated in a few years from which more definite conclusions could be drawn. To this end he suggested that the council issue a series of questions for the collection of information concerning these operations.

Mr. Baker Brown felt extremely obliged to Dr. Lee for bringing this subject so frequently under discussion, for the greater the investigation the greater the elimination of truth. He had frankly published every unsuccessful case in his own practice, and he believed as a rule other ovariotomists had done the same. He had performed the operation fifty-three times during the past twelve years, and the result had been twenty-nine recoveries and twenty-four deaths. The mortality in his practice of late had been very much less than during the first years, there having been in the thirty-one operations performed in the London Surgical Home only ten deaths, and only four in the last fifteen operations there and in private practice. He believed it to be the most dangerous operation ever performed; that he never advised a patient to have it performed, but, after having placed all the facts before her, he left her, assisted by her friends, alone to decide; and although easy of performance, the complications are often of the most serious nature. He considers the most important part of the question that of diagnosis; and although he had devoted more than thirty years of his life to the careful study of the subject, and had paid special regard to the question of diagnosis, he unhesitatingly affirmed, that there were no rules that could be laid down so absolute as to enable any surgeon to diagnose with perfect certainty before operation. He therefore hoped Dr. Lee would continue to devote his powers of mind to the solution of this difficult problem, believing that by so doing he would do more good service, and strengthen the hands of the operating surgeon, than by any attempt to discourage ovariotomy. He had, ten years before, operated on his own sister, who recovered, and since married, and had recently given birth to her fifth child; and if occasion offered, he should follow the same plan in any one near and dear to him, believing the operation justifiable, and entitled to be recognised as a legitimate one in surgery.

Dr. Tyler Smith said the peculiarity about ovarian disease is, that, beyond the material abstracted from the system, it is only injurious by mechanical pressure. It does not otherwise threaten life. He therefore did not think it right to operate until the health began decidedly to give way, without waiting until the health was so completely broken as to destroy the chances of the success of the operation. By so doing we run far less risk of peritonitis than by operating when the patient is in robust health. The only evil of delay is the possible formation of adhesions; but even these do not greatly diminish the chances of success. By acting upon these principles he has been successful in twelve out of fifteen cases; and he has only made one error in diagnosis, in which the disease was cancerous tumor of the mesentery.

Mr. Spencer Wells and Mr. Charles Hawkins both spoke in favor of the operation when guided by the principles advocated by Mr. Tyler Smith; and both urged the adoption of Mr. Macilwain's suggestion.

Notwithstanding Dr. Lee's incredulity concerning the propriety of this operation, it has certainly been more successful in this country, as will appear when the subject is brought before the New York Academy for discussion.

Dr. Charles Clay has given to the *Obstetrical* Society of London some statistical observations on ovariotomy, in which he stated that he had performed 109 peritoneal sections, of which 104 were for ovarian extirpation, three for cutting down upon the tumor to establish ulceration where its removal was impracticable, one for Cæsarean operation, and one for the removal of both uterus and ovaries. Of the 104 ovarian cases, 72 recovered, 32 died; all the ulcerative cases recovered; the Cæsarean section lived to the fifteenth day; and the case of the entire removal of both uterus and ovaries recovered. Of the 32 deaths, 10 died from the immediate effects of the operation, 10 from inflammation, 10 from prostration, and two from hæmorrhage.

He attributes much of his success to the raised temperature of the room for the operation. He values chloroform highly, but would not employ it if the woman could face the difficulty without it. He operated fourteen times before chloroform was discovered, and nine recovered. He attributes the distressing vomiting in a great measure to the use of cloroform, as he saw but little of it in the fourteen cases where it was not used. For the relief of this he recommends patience until the blood has got rid of its carbon, simple drinks, and as little food as possible. In all cases the length of the incision was commensurate with the tumor to be extirpated, he preferring a large incision to a small one.

Dr. Leonard J. Sanford, of New Haven, a graduate of Jefferson Medical College, Philadelphia, class of 1854, has been appointed Professor of Anatomy and Physiology in the Medical Department of Yale College, in place of Professor Charles Hooker, deceased.

Gangrenous Fly.—The inhabitants in the neighborhood of the cemetery of Montmartre, Paris, have suffered from the attacks of a "gangrenous fly," which causes inflammation, mortification, and death within twenty-four hours. Many persons have fallen victims.—*Lancet.*

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, March 11, 1863.

DR. H. B. SANDS, VICE-PRESIDENT, IN THE CHAIR.

RHEUMATIC ARTHRITIS OF HIP SIMULATING FRACTURE OF NECK OF FEMUR.

Dr. Sayre presented a specimen of rheumatic arthritis of the hip-joint, which gave very much the appearance of a fracture within the capsular ligament. A few days before he happened accidentally to be present at a post-mortem examination of a man fifty years of age, who had died suddenly of some disease of the heart. Dr. Sayre was struck at first with the position of the right foot, which was everted. On further examination he found the limb about three-fourths of an inch shorter than its fellow, and, though it allowed of free rotation and adduction, the limb could not be adducted beyond a certain point. On opening the joint the upper margin of the acetabulum was surrounded by a prominent ridge of bony material, while the head of the femur was deflected downwards, and was subject to an irregular enlargement. At first Dr. Sayre thought there were evidences of a union of a fracture within the capsule by a line which passed irregularly around the neck a short distance from the head of the bone, but on sawing through the specimen such a suspicion could not be confirmed. He accounted for the shortening either by the deflection of the head of the bone or the enlargement of the acetabulum, which latter condition was sufficient to account for the eversion. The difficulty in adducting the limb was plainly ascribable to the hyperostosis behind the superior portion of the head of the bone.

FIBRO-NUCLEATED TUMOR OF RIGHT CHEEK.

Dr. Sands presented three specimens of tumors. The first was removed two weeks previously by Dr. Parker from a gentleman sixty years of age, who carried an enormous growth from his right cheek for thirty years. The tumor at first commenced as a small lump on the right cheek about an inch in front of the angle of the jaw. For a number of years it remained about the size of a walnut, and was freely movable under the integuments. Subsequent to this, until within the past six months, it increased slowly in size. Previous to the operation the tumor had attained a very remarkable size, being of a more or less irregular pear shape, and hanging from the cheek it nearly reached the shoulder, and by its weight alone compelled the patient to carry his head to one side. At the lower and anterior aspect of the tumor was an outgrowth which was somewhat softer than the surrounding parts. At one or two points fluctuation was distinct. At the point of attachment the tumor measured eighteen inches, its largest circumference twenty-three inches, and its weight was five pounds. The operation for its removal was unattended with any difficulty, and the substance of the tumor contained several cysts of various sizes, containing in the aggregate about half a pint of fluid. On microscopic examination the tumor proved to be of that character denominated by Mr. Bennet fibro-nucleated. The appearances were very similar to those presented by fibrous tissue, but the striations were not so well marked. The substance was mostly composed of free nuclei, containing one or two nucleoli, and joined together by a homogeneous substance. These nuclei were uniform in size, were very small, and lay parallel to each other with no tendency to cell formation.

CHRONIC MAMMARY TUMORS.

The two other tumors were both examples of what is known as the chronic mammary tumor. The first was removed by Dr. Parker from a married lady forty years of age, with no children, who was in the enjoyment of perfect health up to the time of the appearance of the tumor about a year ago. It grew with great rapidity up to the time of its removal, when it measured two inches by three. It was found imbedded in the mammary gland, and was closely connected with it; it was nodulated and hard to the feel. Under the microscope its structure was similar to that of the mammary gland, there being an abundance of well shaped follicles filled with small epithelium.

The second tumor was remarkable for the small size (that of a nutmeg) which it had attained after a growth of eight years. It was removed by Dr. Peters from a married lady, who first noticed its appearance shortly after lactation. It was freely movable under the skin, and exquisitely tender. It measured in its longest diameter five-eighths of an inch, and Dr. Sands thought that it was the smallest one of the sort on record. The largest one that he had seen removed was by Dr. Wood, and that weighed fifteen pounds.

Dr. Wood remarked, that the patient of his referred to presented herself not long ago at the hospital with an ugly-looking cicatrix.

The Society then adjourned.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, Feb. 18, 1863.

DR. JAMES ANDERSON, PRESIDENT, IN THE CHAIR.

DISCUSSION ON STRANGULATED HERNIA.

Dr. G. Buck presented the following account of cases in which the operation of dividing the stricture external to the hernial sac was performed.

Case I.—Inguinal Scrotal Hernia.—On Saturday, Nov. 8th, 1862, at noon, visited Mr. S—— at No. — Eighth avenue, in consultation with his attending physician. Mr. S—— is a native of Germany, 47 years old, a grocer by occupation, of a corpulent habit, weighing over 200 lbs., addicted to the free use of gin, and of a lethargic temperament.

He was suffering from an inguinal hernia of the right side that had been strangulated for more than forty-eight hours. The tumor was of the size of a cocoa-nut, and distended the scrotum to such a degree as to conceal the penis; the right testis lay at the bottom of the scrotum, in loose contact with the tumor; the left testis was on a level with the middle of the tumor, and on the left side of it. The scrotum, though stretched, was not adherent nor œdematous. The tumor itself was very tense, elastic, resonant on percussion, and not painful when handled. The abdomen was moderately distended, but not tender on pressure. Enemata had been administered, but without producing any evacuation. The pulse was calm and undisturbed.

The hernia had existed for about eight years, and, until recently, had always been reducible. He had never worn a truss, but had supported the tumor with an ordinary suspensory bandage. On the preceding Thursday night he waked out of sleep, and found his hernia had acquired a much increased size, and he could no longer diminish it by his usual manipulations. Early on Friday morning he visited the market, as he was accustomed to do, but on his return home in the forenoon was obliged to take to his bed, on account of the severity of the abdominal pain and vomiting.

Enemata containing spirit of turpentine had been administered, and ice-water applications made to the hernial tumor, but without relief. At the time of our visit, the vomiting having ceased, and the other urgent symptoms abated, it was decided to make further efforts to overcome the obstruction and evacuate the bowels. Compound infusion of senna and repeated laxative enemata were directed.

At midnight I was summoned to operate. The bowels had not moved. Vomiting had returned, and persisted with increasing frequency. In this case it was deemed of special importance to avoid opening the sac, as the exposure of so extensive a surface of peritoneum would have certainly been followed by fatal peritonitis.

The operation was performed as follows, without the administration of anæsthetics. An incision of five inches in length was made over the line of the axis of the tumor, extending to an equal distance above and below the seat of the stricture. The division of the integument and subjacent loose tissues exposed to view the immediate coverings of the sac. These were raised layer by layer, and traced upwards towards the external ring with the handle of a scalpel and the forefinger, till at length a level was reached along which the forefinger arrived at and engaged itself with the nail under the lower edge of the intercolumnar fascia, which was very tense, and tightly constricted the neck of the sac. Cooper's hernia knife was conducted flatwise under the stricture, care being taken to keep it parallel to the axis of the body. Its cutting edge was then directed forwards, and, by elevating the handle, was made to press against the stricturing band and divide it.

Constricting bands were felt still higher up and divided throughout their whole extent. At once the hernial tumor began to relax, and a movement of flatus was perceptible within it. The patient himself expressed relief, and soon called for assistance to have a stool. By compressing and kneading the tumor, and crowding its contents towards the inguinal canal, the sac was emptied, except a small portion of what appeared to be indurated omentum.

The wound was closed with four sutures and adhesive straps, over which a compress and spica bandage were applied.

Nov. 9th.—No vomiting, no abdominal pain, no tenderness of the tumor, which is soft and supple. Has had several liquid stools; moderate febrile reaction has taken place; pulse full and about 100.

Nov. 10th.—Has passed a comfortable night. Belly moderately tumid, supple, free from pain. Scrotum, though distended, is soft; its contents are easily displaced by pressure, and pushed back into the abdomen as far back as the adhesions will permit. No tenderness of the parts under handling. Has had several liquid stools; pulse about 100. Ordered pulv. Dover., gr. x.

Nov. 11th.—Patient has vomited; belly and scrotal tumor the same; pulse more frequent. Ordered calomel gr. x., to be followed by ol. ricini ℥ ss. in four hours.

Nov. 12th.—Several evacuations followed the administration of the cathartic. A great change has taken place in patient's general condition. The surface is relaxed. Pulse very much increased in frequency and weak. Countenance expressive of exhaustion. The belly and scrotal tumor supple and entirely free from pain; everything is tending to a state of collapse; has vomited once or twice. Directed stimulants, which have been given sparingly during the last twenty-four hours, to be increased ad libitum. Patient has also taken carbonate of ammonia. At 5 P.M. rapidly changed for worse, and died at 6 P.M.

Post-Mortem Examination, seventeen hours after death.—Subcutaneous fat over the abdomen of more than an inch in thickness. The sutures still remained in the wound, the edges of which are ecchymosed. The abdominal cavity being laid open, the small intestines were found considerably distended. No fluid in the peritoneal cavity; no recent lymph, nor increased vascularity, nor recent adhesions. On tracing the protruding viscera down into the hernial sac, the internal abdominal ring could be distinctly traced out, and constituted the dividing line between the abdominal cavity and the sac. It was very much increased in its dimensions, allowing four fingers to pass through it, though occupied by the protruding parts. The contents of the sac, which reached the lowest point of the scrotum, consisted chiefly of indurated, thickened omentum, which, when spread out, covered a surface of nearly a foot square. A single knuckle of small intestine lay behind the omentum, collapsed, and presenting no signs of disorganization or of recent lymph upon its surface. The omentum occupying the sac was congested in a moderate degree, but nowhere disorganized or gangrenous. The old adhesion which fastened it to the sac was limited to a narrow band not exceeding two fingers in breadth, and was situated low down in the sac. The testicle occupying the most inferior part of the scrotum lay external to the sac, showing the hernia to have been of the indirect inguinal variety.

The examination was limited to the parts described.

Remarks.—The examination showed conclusively that the operation had perfectly accomplished its object in removing the stricture, such as undue distension, peritonitis, or disorganization. The patient's previous habits of intemperance and excess had impaired his vital powers to such a degree, that they could not rally from the shock sustained by the preceding state of strangulation.

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FOREIGN CORRESPONDENCE.

LETTER XLII.

By PROF. CHARLES A. LEE.

Rome, Nov. 28, 1862.

The great hospital of *Santissima Salvatore*, which I visited next, consists of two piles of magnificent buildings, situated on opposite sides of the street leading from the Coliseum to St. John Lateran. It was founded by Cardinal Colonna in 1216, and went under the name of St. Andrew until committed to the present confraternity, from which it derives its present appellation. This religious order, composed at first of twelve noble Romans, had charge of the chapel called *Sancta Sanctorum*, near the Lateran palace. The physicians in charge at the time were extremely civil to me, as they have been everywhere, and gave me every facility for seeing and investigating everything connected with the establishment. The hospital is chiefly for females requiring medical treatment, receiving patients of any religion, age, rank, or country. It has, also, a department for those suffering from sudden violent accidents, and a ward for aged females afflicted with chronic disease. It has about 600 beds, and its register shows a greater mortality than any other hospital in Rome, being upwards of 14 per cent. This high death-rate is doubtless owing partly to the insalubrious situation in which it is placed, and partly to its admitting so many aged persons afflicted with chronic and incurable complaints. The principal ward is an immense hall of large proportions, perhaps 300 feet long, and of proportional width and height; the windows, placed high above the floor on each side and frequently opened, allow of the most perfect ventilation. Its ordinary staff consists of two principal physicians and one principal surgeon, with two assistant-physicians and two assistant-surgeons, besides its attendants and dressers, twenty in number. Regular visits are made twice in the day, but physicians are always about the establishment, ready to give their services when wanted. A religious order, called *Cruciferi*, distinguished by a red cross on the habit, attends to the spiritual wants of the patients. In 1821 a community of *Sisters of Mercy*, who had dedicated themselves to visiting the sick in another part of the city, were transferred to this hospital by Pope Pius VII. The same order had important privileges granted to it by Popes Leo XII. and Gregory XVI. The vows of poverty, chastity, obedience, and hospitality, last only for a year, and are renewed at the end of that time; but when its members attain the age of forty they can make the vows perpetual. A large majority of the patients at the time of my visit were laboring under some of the forms of fever, malarious chiefly, but many were cases of typhus and typhoid. The treatment does not vary essentially from that pursued in similar cases in our own country, except that depletion, especially by leeches, is far more frequently practised. A large fountain in the central court serves, not only for the preservation, but also the breeding and multiplication of the leeches.

What strikes an American as somewhat strange is to see so many religious moving about from bed to bed, bringing food or drink to the patients, and soothing and comforting them by constant attentions, kind words, and spiritual ministrations. It is not uncommon to find patients in this hospital of very great age, several between eighty and ninety, some between ninety and one hundred, and not unfrequently centenarians. Two wards in this hospital are devoted to cases of tuberculosis or pulmonary phthisis, the average age of the patients being apparently between twenty and thirty. As this disease is universally regarded here as *contagious*, they are never mixed up with persons laboring under other diseases, but have separate rooms or buildings assigned them. Most of these cases are brought to the hospital late in the progress of the disease, many in the last stages, often probably for no other reason than that they may have the certainty of enjoying the consolations of religion in their dying moments.

One great recommendation of this noble institution is, that admission is freely granted to all who apply; no restriction, no red-tape, no certificate from a director or recommendation from a subscriber is necessary, as with us. The doors fly open to all who wish to enter; no preliminary examination even is required. Here is the patient, there a bed waiting for him; no hope delayed to make the heart sicker which was sick before. The religious, including nuns and priests, reside within the building, each having their own convent. The expense of supporting a patient here is about twenty-five cents per day. Once a year, on a particular Sunday, a grand procession of the Blessed Sacrament issues from the adjoining Church of St. John Lateran, and, crossing the square, passes through the wards of the hospital, the Sacrament being borne by the Cardinal Arch-Priest of the Basilica, the Pope and all the cardinals assisting. The object of this procession seems to be to have a salutary effect on the sick and dying, and cheer them in their afflicted condition.

Besides the public hospitals at Rome already mentioned, there are several small institutions of a more private nature belonging to different nations and corporations; the Germans, Spaniards, Portuguese, Lombards, Florentines, and Lucchese, have each their separate hospitals. When the late Chevalier Bunsen resided in Rome as Prussian ambassador, he founded a hospital on the Monte Caprino, near the Capitol, for poor Protestants. This is supported by private subscriptions, and such of the patients as are able pay a small sum for their support and medical attendance. The hospital is under the protection of the Prussian Legation, near to which it is situated. The sick ward forms a floor in a large building overlooking the Forum and the Palatine. Murray speaks of it as well deserving the support of Englishmen who visit Rome, "as the only one where poor British Protestants can be received without being subjected to the persecutions of the friars and attendants in the other hospitals, to bring about their conversion to Romanism."

From a careful examination of the subject I am satisfied that there are few, if any, capitals in Europe where the hospitals are more numerous in proportion to the population, constructed on a grander scale, or endowed with more princely liberality, than in Rome. The annual endowment of these establishments is no less than 200,000 dollars, derived from lands, from grants, and from the papal treasury. Formerly administered by separate confraternities, the hospitals were placed by the French government under one general board, as in Paris, from which the best results were obtained; but of late years the ancient system has, in some degree, been restored, each establishment being placed under a separate direction, with a prelate at its head. Such a system is liable to abuses, especially jobbing, as we know from our own hospital experience, but it is difficult to hit upon any plan of management which is not open to some objections. Formerly they were ill administered and badly managed in their domestic arrangements. Considerable improvements have been introduced of late years, but especially since 1849, from diminishing the interference of the clergy and friars, and limiting it to its purely spiritual duties. The late accomplished Princess Doria made great efforts to introduce the French Sisters of Charity into this city, and succeeded to some extent, although opposed by many of the ecclesiastics connected with these institutions. It would not be just, perhaps, to place the Roman hospitals before those of Florence or Milan, but it is difficult to say wherein they are inferior. It is certainly a somewhat remarkable circumstance that, with such a wide field for anatomical and pathological investigation, the medical school of Rome is behind all the others in Italy, and has not produced a really great man, or even a medical work of superior merit, during the present century; nor is it less surprising that in this great city, the real capital of Italy, there is not a single medical periodical published, nor is there a medical society or scientific association of any description in this enlightened city of nearly 200,000 inhabitants. I have inquired of native Romans the reason of this, and have been answered that no secular societies or organizations are permitted here, on account of the danger of their being converted into political associations and used for revolutionary purposes. Whether this be the true reason or not I do not pretend to decide; but those who have resided here for some time as medical practitioners from other countries assure me that it is the true reason. Great credit is, however, due to the present Pope for the deep interest he has always manifested in the hospitals, prisons, reformatories, almshouses, lunatic asylums, and educational institutions, in Rome. He has made additions to many of the hospitals from his own private resources; some he has entirely rebuilt. He has introduced many important reforms, has suggested and had carried out several new and improved arrangements, and has watched over them all with paternal care and solicitude. He has personally visited and inspected every hospital in Rome, and that, too, at times when his visits were wholly unexpected, so as to learn from his own observation their actual condition. During the prevalence of cholera he fearlessly went among it, visited the cholera hospitals, cheered the patients, encouraged the physicians and nurses, and did much to allay the panic and dread of the disease universally prevalent, and dispel the idea of its contagiousness. If Rome is far behind other cities in many things, as she undoubtedly is, some allowance should undoubtedly be made for the present pontiff, who, with the best intentions and the most benevolent dispositions, is hampered by what he and his counsellors consider the political exigencies of the times.

The *Lying-in Hospital* of Rome, *San Rocco*, is connected with the Foundling Hospital, and consists of one great hall and several chambers, one of which is appropriated to births. It was originally established in 1560, with fifty beds, partly for medical and partly for surgical cases; it was, however, changed from its original destination and converted to its present purpose by Clement XIV. in 1790. It has at present from thirty to forty beds, each bed having a curtain and screen, so that the occupants are not seen by the others. All who apply are received without any questions being asked; some with their faces covered with veils which they are not required to remove. On the register they are only known as guests at a hotel, by their number. No one is allowed, unless by special permit, to enter the hospital, except the physicians, nurses, and attendants. Many are received at a considerable period before their confinement, so that their condition may not be suspected by their friends. If able to pay a small sum they have superior accommodations; and when they are well enough to leave the institution they pass out by a passage in the rear, through an unfrequented street, and thus escape all danger of detection. If they wish to reclaim their children at some future time, some distinguishing mark is put upon them. But the children generally are sent to San. Spirito. Usually patients are received only a few days previous to delivery, and they remain on an average about one week after confinement. It is supported partly by its own revenues and partly by the State, like the other public institutions of Rome. Whatever objections may be raised by some against the secret policy pursued in this institution, I am satisfied both of its expediency and wisdom, as it leaves open a path to moral and social redemption which a different policy would close for ever. It is a course dictated alike by wisdom and humanity, and no one can justly charge its managers or the State with encouraging vice or immorality, for they act on the well known and admitted principle that the great object of human laws, as well as human institutions, is the reformation rather than the punishment of the offender. A woman may recover character and self respect if she has a fair chance to make the experiment; but what chance has she who is once known and publicly branded as unchaste and the mother of illegitimate offspring, to say nothing of the wretchedness entailed on the child, or the temptations to infanticide?

American Medical Times.

SATURDAY, AUGUST 15, 1863.

PROGRESS OF AMERICAN MILITARY SURGERY.

The war of the rebellion found the medical profession of the United States practically unfamiliar with military surgery. With the exception of the surgeons surviving the war with Mexico, few of the present generation had ever had sufficient experience in military life to have gained a thorough knowledge of the duties of the army surgeon. Our literature of military surgery was limited to English works, and whatever opinions were entertained were drawn from this source. The profession, however, was ripe for the study of this most interesting branch of our art, and it required but the field for labor and the opportunity for investigation to develop a latent power and activity never equalled in the history of medicine. The drama of civil war on a Titanic scale, waged with all the accessories that modern military science could devise, suddenly afforded both the field and the opportunity, and thousands of laborers rushed forward to the work. It will ever be a source of regret that in the excitement of the times, and in the urgent wants of the service, many unworthy and incompetent men found their way to important positions. Foreign medical journalists have taken advantage of this fact, and are accustomed to publish every scandalous item gleaned from newspapers reflecting unfavorably upon the surgeons of the United States army, and hold them up as evidences of the degenerate condition of the profession in this country. But we may safely challenge the Governments of the old world to improvise armies of such magnitude, and supply them with a medical corps from civil life which will present a more honorable record. Whatever may have been our deficiencies in the knowledge of military surgery heretofore, it is now certain that we shall soon, if we do not already, surpass all other nations in our proficiency in this department. This war has called into active service not far from five thousand surgeons. Their duties have been of the most varied and active character. They have followed their commands to the camp, to the field, and to the hospital, and thus have become personally familiar with every branch of the army medical service. But hundreds of practitioners have been compelled by sickness or interest to retire to civil life, and other hundreds have taken their places.

There is therefore diffused through the profession a degree of familiarity with the practical duties of the army surgeon quite impossible to correctly estimate.

It is gratifying to notice the fact that no pains are spared by the Medical Department of the army to encourage the efforts of the army surgeon to improve his knowledge of military surgery, and render permanently useful his investigations. His observations, records, operations, etc., are all carefully preserved, to make up the future medical and surgical history of the rebellion. In the Medical Museum at Washington, already rich in specimens illustrative of the peculiar pathology of military surgery, are preserved all the specimens which the surgeons transmit, with the history of each preparation, and the name of the individual surgeon who presents it to the Museum. Thus from all this vast field, over which is scattered a multitude of ardent laborers, are being garnered the ripe fruits of observation, study, and practice, and we can but feebly estimate their aggregate value.

We may gain some insight into the progress which the medical department is making in the preservation of material from two pamphlets recently issued from the Surgeon-General's office. The first is a catalogue of the Medical Museum, and to this we have already made reference. The second is a "Consolidated Statement of Gunshot Wounds," compiled by Surgeon J. H. Brinton, U.S.V. It embraces a period of but four months, and is in many respects imperfect, yet no one can fail to see of what vast importance will be the aggregate of such facts properly collated. They will illustrate many points now but obscurely understood, and lead to conclusions which cannot be disputed. We shall reserve a critical analysis of this most interesting pamphlet for another occasion.

It must be evident to the most superficial observer that, while the nation is being rapidly educated in military science and art, the medical profession is progressing with equal rapidity in a knowledge of military medicine, hygiene, and surgery. If we continue to improve our advantages, the day is now not distant when we may become the teachers of military science in every branch.

THE WEEK.

Deaths in the workroom of a court dressmaker in London have recently awakened renewed attention to the subject of better care of the sanitary interests of the laboring poor. At the coroner's inquest the fact appeared that thirty young women worked from morning till late at night in a close room, and worst of all, that those women were lodged by their genteel employer in apartments just spacious enough to admit two beds end to end, and that each narrow bed had two occupants. "Died of apoplexy," was the verdict; but the coroner very properly replied to the greedy employer's inquiry as to what more should be done for the benefit of the seamstresses, by saying "that was a question for a surveyor." In a recent discourse before the Ladies' Sanitary Association, Dr. Richardson declared that the capitalist who overtasked for the sake of gain was nothing less than a homicide. And it is equally murderous to shut up artisans and employees in unventilated and crowded workrooms.

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Bitterly and very justly does the British medical press complain that the Home Government continues to neglect the professional and official claims and dignity of the East Indian Medical service. Not only does there appear to be difficulty in amalgamating the medical service of the old East India Company with that of the royal army, but the medical officers of every grade "are snubbed, their pay kept down, their emoluments shaved off, and their social position depreciated." Even the Royal Warrant, with its enlarged but begrudging assurances of assimilated rank and reasonable social respectability, is not recognised in India. The *Lancet* intimates that the medical department of the royal army is compelled by such unpropitious circumstances to let the honor of its famed competitive examinations be borne away by the very "sweepings of the schools." But the *Lancet* boldly charges that it requires the pressure of promises and invitations to get even such candidates, and that to "*sham* examinations." This sad state of affairs, it is charged, "has been brought about by the ill judged oppression of military chieftains." Thanks to the loyalty and patriotism of the medical profession in our country, such criticism cannot be so justly applied to our army surgeons. The schools have all sent their choicest young graduates into our army and navy; and it will be fortunate for the country and for science if the Secretary of War should become inspired with the lofty sentiments of Sir Sidney Herbert, whose transcendent excellence and genius have so soon been forgotten and dishonored by the official successors of that noble friend of humanity and medical science.

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Small-Pox and other infectious maladies are perpetuated and widely diffused by means of public carriages in this city. The Commissioners of Public Charities have under consideration the question whether special action should not be taken to prevent hackney coaches and public carriages from being occupied by persons suffering from infectious diseases. The Mayor of the city has also called the attention of the municipal government to the subject, at the suggestion of the City Physician. With from fifty to five hundred cases of variola constantly in the metropolis, and with no guards against the unrestrained exposure and transportation of such persons about the city in public vehicles, it is not strange that the loathsome malady is spread to all sections of the country from this city as its perennial nidus.

It is a ludicrous fact that the efforts of Dr. Brady and Sir Fitzroy Kelly, in the British Parliament, to procure the enactment of a suitable sanitary law to regulate and guard the transportation of persons with infectious maladies, has failed in consequence of a clause in the proposed Act, which declares that "in any proceedings, etc. . . . the word *infectious* shall include contagious," and that "every contagious disease shall be deemed infectious." Better to have specified the pestilent infections to be guarded than to attempt such refined definitions. Let the metropolitan district of New York have municipal ordinances prohibiting the employment of public carriages for conveying sick with small-pox, measles, scarlatina, and typhus. Even the lawmakers must learnedly admit that these maladies are "taking," and that restrictions upon them will not be restraints upon the concomitants of "the great social evil" to which the proposed Act of Parliament might have applied.

Reviews.

On the Treatment of Diphtheria, with Illustrative Cases. By E. N. Chapman, M.D., Professor of Therapeutics and Materia Medica, Professor of Clinical Obstetrics, and Physician in the Long Island College Hospital.

Diphtheria is still the most fatal disease with which the country practitioner has to contend. From every section we hear of its prevalence and its fatality. Individual physicians frequently gain reputation for its successful treatment, but the next epidemic too often proves that their ancient specifics have little virtue. The rational treatment of this disease rests in a correct knowledge of its pathology, and until this is obtained all remedial efforts will be empirical.

Prof. Chapman, a thoroughly practical physician, has given in this pamphlet his views of the pathology of diphtheria, and the course of treatment to be pursued. Discarding the theory of its local character, he adopts in full the opinion that it is as much a blood disease as typhus, scarlatina, and rheumatism. He says:—

> "There cannot be a reasonable doubt that diphtheria belongs to this class of blood-diseases. Ostensibly it is an ailment of the throat, attended with inflammation and the effusion from the capillaries of coagulable lymph. So, also, rheumatism presents the appearance of an inflammation of the ligamentous structures; scrofula, of the glands, bones, etc.; syphilis, of the skin, mucous membrane, and periosteum; and variola, rubeola, and scarlatina, of the skin alone, whence they have been improperly classed under the head of cutaneous diseases. The pathology of diphtheria is not elucidated by autopsies, nor by chemical or microscopical examinations. No special structures are invaded, or characteristic lesions discovered; only everywhere is found a dark, grumous blood, filling equally the veins and arteries, and stagnated in various organs MM. Millard and Peter first pointed out that the blood was of a dirty brown color, resembling liquorice-juice or water containing a mixture of soot. During life there are conclusive proofs, in the malignant cases, of a poisoned, disorganized condition of the circulating fluid—the dark, grumous blood oozing from the tonsils when roughly touched, the spontaneous hæmorrhages, the muscular weakness, the prostrated nerve-power, the clammy sweats, the rapid, soft, and shaky pulse, the sphacelation in the fauces, the sequelæ—anæmia, paralysis, etc.—the gradual sinking of the patient, and the extinction of life without an effort at reaction, or the slightest tokens of constitutional resistance. The evidences of a blood-contamination, equal to those seen in typhus, are infinitely greater than those presented in other diseases now universally conceded to arise from this cause. Chemistry detects no material poison in the air during a diphtheritic epidemic, nor any foreign element in the blood, or any change in its constituents, where patients have died of this disease. The changes, and the agencies producing them, whatever they may be, are inappreciable by this means of investigation."

It will be correctly inferred from the foregoing statements what treatment Prof. Chapman advocates. Stimulants and tonics are his main reliance. After detailing thirty-eight illustrative cases he thus sums the treatment of diphtheria:—

> "In the thirty-eight cases of diphtheria detailed above, this alarming disease is presented in almost every varied phase. With a singular uniformity the stimulating treatment, whether in the acute or chronic stage—that of excitement, fever, and inflammation, or of prostration, paralysis, rheumatism, or dropsy—had the same happy effect; and it was in all conditions that had a diphtheritic origin uninterruptedly followed; since we only regarded the causation, not its manifestations—the root of the evil, not its offshoots—and directed our efforts to the removal of a special state of the blood. This state of the blood, which is prone to occur in scrofulous children, or adults reduced by disease or of feeble constitutions, in a certain endemic condition of the atmosphere, is marked by a diminished vital power; which being exalted by stimulants, the symptoms are checked, the inflammation subdued, the membrane removed, a rapid recovery effected, and relapses prevented. In other words, this plan of medication is radical; strikes at the heart of the trouble; whereas most others that have been proposed are but an ineffectual warfare against symptoms. The blood, which is similarly affected in the mild or severe cases, in the first or later stages, only differing in the degree of its dissolution, alone claims our attention. Against this condition, before the disintegration is irreparable, we bring to bear the most powerful means in our hands to buoy up the constitutional powers, and sustain the activity and energy of each function. The first link in this morbid chain being this retrograde movement in the vitality of the blood. when this is checked, fever, inflammation, hæmorrhage, exudation, collapse, paralysis, dropsy, etc., disappear almost magically, from the simple fact that the cause has been rendered null and inoperative, and the prime pathological change removed.
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> "Of the remedies that have been employed in diphtheria, two only have proved themselves in our hands worthy of confidence, with the exception, in the chronic stage, in favor of the salts of iron. These two remedies—alcohol or cinchona in one of its forms—are administered in such doses and at such intervals as to secure one effect—the fullest stimulation of the nervous and vascular systems. From clinical observations and therapeutical deductions we arrive at the practical conclusion, that alcohol is not only a stimulant to the system at large, but also to the blood itself, quickening its vital elaborations, and increasing its vital status; through which a direct barrier is thrown in the way of the disease. In other words, the results produced by the disease, and by the alcohol in the blood, being directly opposite, they neutralize each other; and thus the stimulant assumes in our eyes the position of a true remedy, a trustworthy antidote. Hence its medicinal power, being not only remedial but prophylactic, will prevent the extension of diphtheria in the other members of the family, as well as cure the one affected. This conclusion is a necessary sequence; it the pathology of diphtheria and the modus operandi of alcohol have been correctly appreciated.
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> "In malignant cases of diphtheria, we might desire to avail ourselves of a co-operating remedy; of one, like quinia, that particularly excites the great ganglionic nervous centres; by which means we should attain a maximum of power, and carry stimulation to the highest possible degree The various preparations of the cinchona bark fulfil this indication; and, when pushed to the extent of causing tinnitus aurium, are our most potent nerve-stimulants. Their efficacy is shown in all diseases when the innervation is weakened, disordered, or perverted; in fevers from malaria, in fevers from a blood-poison, and in a variety of morbid conditions attended with an exhausted or defective nervous energy. As a tenderness of the gums is a mark of the saturation of the system with a mercurial, so the ringing in the ears indicates that the brain is fully under the influence of cinchona. Both it and the alcoholic stimulant, whether used singly or united, should be given with regularity and in sufficient doses to obtain their full effects; and then the latter, in a lessened quantity, continued for two or more weeks after the disappearance of the disease and its sequelæ. From the outset to a permanent restoration to health, one, or perhaps both, of these remedies are to be continuously administered.
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> "In the more tedious cases, that retain a hæmorrhagic tendency, the substitution of a sesqui-salt of iron for the cinchona might, for a time, be advisable, when the peculiar effect of the latter on the brain had been attained. These salts of iron, like the alcohol, increase the crasis and coagulability of the blood, as I have experienced in several instances of internal hæmorrhage; but they affect the body of the blood too slowly to be a trustworthy reliance in acute cases. Their action would be slight short of two or three days; whereas the progress of diphtheria brooks no delay. Indeed, one of my cases was attacked with the disease, although the persulphate of iron, in free doses, had been in use for hæmoptysis for more than forty-eight hours. At least fifteen drops of the muriated tincture, or five drops of the solution of the chloride or persulphate of iron, should be administered every third or fourth hour whenever we desire this peculiar change in the blood; but in chronic cases, with more time at our disposal, the dose may be less; since, usually, our main object is now to remedy the anæmia.
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> "Most writers insist strongly on the importance of giving large quantities of animal broths to sustain the strength of the patient, and thus enable him to ride out the violence of the disorder. This, as a medicinal means, cannot but be erroneous in

the early stages; since most of the patients are taken while eating heartily of animal food, and enjoying their usual health. We could not expect that nourishment, however concentrated, which did not prevent the accession of a disease, whilst the digestion was vigorous, can cure it when digestion, assimilation, and nutrition, are completely destroyed. The change of our food into the living structures is something more than its ingestion into the stomach or its absorption into the blood-vessels; and nutriment unappropriated can be but an incumbrance—a foreign element—which will be carried off by the kidneys with the effete matters. Most of my patients took little or no nourishment before convalescing, when it was directed for the same reasons that we order it in other ailments.

"It is important to avoid close, hot, and badly ventilated rooms, and secure a free circulation of air. As soon as practicable the patient should be taken out of doors, and no fear need be entertained of *catching cold;* the disease having no analogy with tonsillitis, pharyngitis, or any other mucous inflammation whatsoever.

"At the present time, the chlorate of potash seems to be the favorite of the hour; but it has, probably, no greater claims to our regard or any more solid foundation for its character as a *specific,* than iodine or cod-liver oil in the height of their fashion; when it was presumed that tubercles would be absorbed, cavities closed, and, in fine, phthisis cured by the marvellous efficacy of these remedies. Theory was the only foundation on which such expectations were based: as it is for the eulogiums lavished on this new wonder by its advocates. They, observing that the blood, removed from its vessels, is reddened when this salt is added, conclude straightway that we can, by its use as a medicine, supply a lack of substance in the lungs; that its elements being set free in the circulation, the oxygen of the salt will not only fill the place of that which should have been received from the inspired air, but by its excess act as a stimulant, as is observed when this gas is inhaled; and that the chlorine, by its antiseptic properties, will purify the blood, and thus the *materies morbi* will be neutralized.

"My observations teach me that the chlorate of potash is perfectly unreliable in diphtheria; and I am not sure its employment may not be injurious; certainly its irritation when gargled does harm, and if, when received into the blood, it is decomposed, the free alkali will act as a liquefacient, by which means the crasis of the blood will be lessened, and the disease increased. All liquefacients, such as alkalies, mercurials, iodine, etc., are contra-indicated in a dyscrasia like that of diphtheria, since their effects coincide with that of the disease; thus rendering the death of the patient, in all severe cases, more imminent. From experiments made by myself recently, however, it is more than doubtful whether any decomposition of the chlorate of potash takes place in the blood. I had under my care a young man, twenty-one years of age, who had had the morbus cæruleus from birth. The surface of the body was of a purple color, from the faulty aeration of the blood. I gave him ʒij. of the chlorate of potash in the twenty-four hours on three different occasions; but at each trial, after continuing the salt two or three days, it had to be discontinued from the irritation set up in the stomach and bowels. The blood was not reddened in the slightest degree, a fact brought to the attention of several medical gentlemen; but the urine was very largely increased, amounting to more than twice the normal quantity, and had a specific gravity averaging about 1010, and an acid reaction."

In regard to local treatment PROF. CHAPMAN differs widely from the majority of writers. He says:—

"It only remains for me to say a few words on the local treatment. This is of little efficacy; and should, in our opinion, be limited to demulcent drinks. Of the many external appliances, leeches, which are exhausting, and poultices or fomentations, which invite the blood to the point of their application, are among the most objectionable; but all, of whatever kind, are useless, if not prejudicial. All irritating, astringent, or stimulating gargles increase the inflammation of the fauces, and thus afford a nidus favorable for the effusion of the membrane; but of the many kinds of local medication calculated to spread the membrane and extend it into the rima glottidis, none could have been devised more singularly appropriate than the various caustic substances in use, which not only augment the congestion already existing, but destroy the epithelium of the unaffected parts; and then, frequently, the membrane takes its place, for the same reason that it appears on the derma where the cuticle has been detached. This, the most simple of all facts, seems never to have attracted any physician's attention. In one of my cases the membrane, two hours after an application of the tincture of iodine, was found extended over two-thirds of the posterior surface of the pharynx.

"In cases where the larynx is not sufficiently implicated to interfere in a serious degree with the aeration of the blood, the general treatment is still to be relied upon as offering the best chance to the patient; but, when at each inspiration there is a forced, though ineffectual, effort to expand the chest, and the skin has a purple tinge, tracheotomy, as a last hope, should be performed in patients over two years of age; whenever, other things being favorable, the exudation is thought not to extend into the trachea."

We have quoted at length the treatment recommended by PROF. CHAPMAN, because of its rational character. It is deduced, we believe, from sound pathological views, and deserves to be most thoroughly appreciated by practitioners. We hope this interesting pamphlet will have a wide circulation.

Army Medical Intelligence.

SURGEON-GENERAL'S OFFICE,
WASHINGTON CITY, D. C., August 4, 1863.

SIR:—Upon the last day of every month the Surgeon-General directs that you forward to this office a statement of all requisitions approved by you, varying from the Supply-Table in either kind or quantity. This statement will mention the articles and quantities required, and the reason demanding such issue.

Very respectfully,
Your obedient servant,
By order of the Surgeon-General.

ORDERS, CHANGES, &c.

Acting Assistant-Surgeon John N. Lyman, U.S.A., has been appointed Surgeon of the 3d Regiment U.S. Colored Troops, and ordered to report to the commanding officer at Camp Penn, near Philadelphia, Penn.

Drs. William R. De Witt, of Pennsylvania, Henry W. Ducachet, of New York, George B. Parker, of New York, Frank Reynolds, of New York, S. S. Schultz, of Pennsylvania, John H. Doughty, of Connecticut, Nathan P. Rice, of New York, P. A. White, of Massachusetts, and Otis M Humphrey, of Massachusetts, have been appointed Assistant-Surgeons of Volunteers.

Leave of absence on surgeon's certificate of disability, has been granted to Assistant-Surgeon Alexander Collar, 24th Michigan Volunteers, for twenty days.

Leave of absence has been granted to Surgeon Charles McCormick, U.S.A., for sixty days, and to Assistant-Surgeon A. B. Chapin, U.S.V., for ten days.

Surgeon N. R. Derby, U.S.V., has been appointed Surgeon-in-Chief 6th Division, 16th Army Corps, at Cairo, Ill.

Surgeon J. G. F. Holston, U.S.V., has been relieved from duty at Columbus, Ky., and will report in person at Cairo to Surgeon A. H. Hoff, U.S.V., Chief of Hospital Transports, for such duty in the Department of Hospital Transportation as Surgeon Hoff may designate.

SPECIAL ORDERS, No. 339.

WAR DEPARTMENT, ADJ. GEN'L'S OFFICE,
WASHINGTON, July 30, 1863.

Assistant-Surgeon Elbert Rowland, 127th New York Vols., dismissed by Special Order No. 281, current series, from this office, for disobedience of orders in failing to report for medical treatment in this city, is hereby restored to the service, provided the vacancy has not been filled, evidence of which must be obtained from the Governor.

The report of the General Court-Martial in the case of Assistant-Surgeon Cyrus D. Tuck, 9th Maine Vols., promulgated in General Order No. 41, Headquarters Department of the South, dated September 25, 1862, not showing that either the Court or Judge-Advocate was sworn, the sentence of dismissal is inoperative. The offences, however, of which the accused was proved and found guilty, would justify his summary dismissal. The President, therefore, directs that Assistant-Surgeon Cyrus D. Tuck be dismissed the service of the United States, to date from the 25th day of September, 1862.

Surgeon W. D. Stewart, U.S.V., will report in person, without delay, to Brig.-General B. F. Kelly, commanding Department of West Virginia, for duty in that Department.

By order of the Secretary of War,
E. D. TOWNSEND,
Asst. Adjutant-General.

Leave of absence for fifteen days has been granted to Acting Assistant-Surgeon J. G. Ryerson, U.S.A.

The resignation of Surgeon E. C. Franklin, U.S.V., now on sick leave at St. Louis, Mo., has been accepted by the President.

Assistant-Surgeon T. P. Seely, U.S.A., has been ordered to report to Governor John A. Gurley, of Arizona, at Fort Leavenworth, to accompany his escort to Santa Fé, N. M.

Original Lectures.

DISEASES OF THE RESPIRATORY ORGANS IN CHILDREN.

BEING A COURSE OF LECTURES PREPARED FOR DELIVERY DURING THE SPRING SESSION OF 1862 IN THE COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.

BY THE LATE
C. VAN ALEN ANDERSON, M.D.,
PHYSICIAN TO CHILDREN'S DEPARTMENT, DEMILT DISPENSARY, N. Y.

LECTURE VI.—PART I.

BRONCHITIS AND PNEUMONIA.

The diseases which we have so far studied belong preeminently to early life. They are all in some way connected with the passage of the air from the exterior of the body to the lungs, and with the exception of coryza, derive their chief interest from the part they play in interfering with the functions of the larynx and trachea. We have, therefore, considered their history, causes, symptoms, and treatment, as fully as the time would allow, and have, I think, discovered that their peculiarities are worthy of our closest attention.

The remaining disorders of the infantile respiratory apparatus are not confined to this period of existence, for they occur likewise in mature age. Their lesions are found in the cavity of the thorax; their pathology is well understood, and you have already become acquainted with them under the names of bronchitis, pneumonia, pleurisy, and phthisis. While, therefore, I need not repeat to you what you have already learned, yet the idiosyncrasies of the child's constitution justify me in pointing out to you in what respects these complaints coming on in infancy differ from themselves when they are seen after puberty.

As the three first of these affections differ from each other not so much in their nature as in their location, let us endeavor, in the first place, to understand clearly what we are about by recalling the chief points in the anatomy of the lungs.

They are to all intents and purposes composed of three structures:—1st. The bronchial tubes and air vesicles; 2d. The parenchyma, or connective tissue; and 3d. The pleura, or investing serous membrane.

The bronchial tubes, in consequence of their ramification to all parts of the lungs, have been frequently compared to a tree with its continually dividing and wide-spreading branches. They begin, you know, with the primary divisions of the trachea into the right and left bronchus, and thence dividing and subdividing they finally terminate in the air vesicles, growing smaller and smaller meantime. The trunk of this tree is the trachea, its branches are the bronchial tubes—and the air-cells are the infinite multitude of leaves which seek the invigorating influence of the atmosphere. If we study the development of the lungs in the fœtus, we are enabled to follow the analogy still further; for we shall find a rudiment of the larynx very early in inter-uterine life, from which the bronchi, and at the sixth month the air-vesicles, are produced by a never-ending process of *budding*—arborescent processes all the time spring from one another, until in the course of development the finer tubular branches leaf out into air-cells.

The larger bronchi are composed of a fibrous membrane containing cartilages, a layer of involuntary muscular fibres, and a mucous lining. As the air-tubes become smaller, the cartilages, growing fewer, at last disappear, and the mucous membrane is gradually reduced, so that tubes the twenty-fourth of an inch in diameter have only an extremely thin wall. At the termination of these tubes it ceases abruptly, and the fibrous membrane is continued into the air-cells, which are entirely deprived of the smooth unstriped muscles.

The parenchyma of the lungs is found between the vesicles, and consists of a large quantity of yellow elastic tissue, of the ramifications of the pulmonary artery and veins, bronchial arteries and veins, lymphatics, and nerves. The branches of the pulmonary artery follow pretty nearly the course of the bronchial tubes; ultimately, having attained an extremely minute character, they terminate in a capillary plexus which lies on the wall of the air-cells in the middle of the fibrous tissue: the pulmonary veins arise from this plexus, and, uniting with each other, form larger and larger trunks, which accompany the arteries and bronchial tubes. By this arrangement the venous blood brought by the pulmonary artery to the lungs after having been purified in the parietes of the intercellular passages, returns as arterial blood through the pulmonary vein to the left auricle of the heart. The office of the *bronchial* arteries being the nutrition of the bronchi, they ramify upon the walls of these tubes, while the venous blood is returned by the bronchial veins to the vena azygos.

All of these structures are bound together, and its shape is given to the lung by the investing serous membrane or pleura. The pleura possesses the same character that serous membranes do in other parts of the body; it covers the whole lung as far as the root, and is then reflected upon the parietes of the chest, the reflected portion, or pleura costalis, besides forming the internal lining of the ribs and intercostal muscles, also covering the diaphragm and the thoracic surface of the vessels at the root of the neck.

Now, what I want to impress upon your mind is, the fact that the essential nature of bronchitis, pneumonia, and pleurisy, is the same, and that the differences we observe between them depend on the various structures of the lungs, and not on the constitution of the disease itself. For, if we consider for a moment what we mean by these three words—bronchitis, pneumonia, pleurisy—we will find that they do not convey the idea of three separate and distinct disorders, but rather that of one morbid process—inflammation—manifested either in the mucous lining of the bronchial tubes, or in the highly vascular intercellular tissue, or in the investing serous membrane. But each of these diverse formations has its own laws both of health and disease; and therefore they furnish us with their own pathological results, and with their own peculiar symptoms, although the intimate nature of inflammation is the same in all. If we bear this in mind, we shall be at no loss for our treatment; for instead of trying to recall what is good for bronchitis, and what for pneumonia, we shall rather endeavor to follow out the principles which are taught us by science to be applicable to inflammation in any part of the body.

Inflammation of the mucous membrane of the bronchial tubes, or, in other words, bronchitis, is a disorder which in children is not only very frequent but also sometimes very fatal. It derives its importance not only from the profound effect it produces upon the system in early life, but also from its tendency to spread from the bronchi and air-cells to the parenchyma, thereby producing pneumonia, and from its liability to be followed by collapse of the lung. From the moment of birth to the end of life all are exposed to it, but it requires most consideration in infancy and old age.

The causes that produce inflammation of the air-tubes are much the same in childhood as they are in mature life. As the prolonged action of cold, sudden variations of temperature, and a considerable degree of dampness in the atmosphere, give rise to it, we find it most frequent in winter and spring, when these conditions are most marked. Poverty, also, brings these maladies in its train, as those of you who fill situations at our dispensaries and hospitals will discover hereafter; for the children of the poor are, as a rule, badly nourished, poorly housed, insufficiently clothed, and exposed to great alternations of heat and cold. The occurrence of one attack of bronchitis or pneumonia, instead of preventing subsequent seizures of the same disease, on the other hand predisposes towards them; as do also weak cachectic constitutions, the prevalence of east or north-east winds, disorders of the alimentary canal, the great changes which take place at the period of dentition, certain eruptive fevers, particularly measles, and, lastly, some peculiar epidemic influence which at times prevails extensively. When from any of these causes there has been inflammation of the mucous lining of the bronchial tubes, we find the following changes after death on both sides of the bronchial tree: The mucous membrane is reddened by a more or less intense congestion of its delicate capillaries; an appearance early seen in the larger tubes, but difficult to make out in the smaller ones. This redness is distinguished from that due to injection of the subjacent tissues, by its being quite as striking where the membrane passes over the cartilaginous rings as it is in the spaces between them; and when we discover that it does not disappear by washing, we know that it is not owing to the transudation of the blood through the coats of the vessels after death. This coloring is more marked in the inferior and posterior portions of the lungs.

Although we have no reason to doubt that inflammation produces both thickening and softening of the mucous membrane, we are not able to perceive these alterations in the majority of cases; and all experiments made in order to arrive at a positive result on this subject have been perfectly fruitless. Neither are we to expect to meet with those ulcerations of the mucous membrane of the trachea and bronchi which are comparatively common in the bronchitis of the adult.

When the attack has been moderately intense, the bronchi usually contain a quantity of transparent viscid mucus, mixed with a greater or less quantity of air-bubbles. If, on the other hand, the disease has been violent, a thicker and more opaque liquid is observed, white or yellowish-white in color, very adherent, containing a proportion of pus, or perhaps even consisting almost entirely of pus. These liquids may, however, be reddish, bloody, and have small particles of plastic lymph mixed with them.

In many cases of acute bronchitis another and perhaps more characteristic lesion is discovered—dilatation of the bronchi. An alteration in the calibre of these tubes is observable, either upon one single point or throughout their whole extent. This appearance can be best demonstrated by following their course with a pair of scissors, which will arrive without difficulty at the surface of the lung, when, on opening the tube thus divided, it will be seen to have preserved, or perhaps even to have increased its diameter from one of the primary bronchi until it nears its termination. This dilatation is due to the weakening of the muscular fibres of the air-tubes by inflammatory action, and to the mechanical results of the accumulation of viscid mucus within them.

According to the extent of the disease we shall find lesions of the air-vesicles, or, if the inflammation, as is very frequently the case, has seized on the lung-substance, the alterations consequent upon pneumonia. In the former case there is no air in the lung, but it feels tough and solid, and over its surface are scattered a number of small reddish or yellowish miliary points, which somewhat resemble a deposit of tubercles: if, however, we touch one of them with the point of the knife, a drop of pus exudes, and the spot vanishes. This appearance, however, is by no means common.

As pneumonia is rare as a primary disease in childhood, and most frequently arises from the passage of inflammation from the bronchial tubes and air-vesicles to the substance of the lung, I shall make no apology for speaking of it in connexion with bronchitis. We find in ordinary pneumonia the same conditions of engorgement of red and grey hepatization that we have in the adult, but very often we find them coexisting in the same subject, which is the great peculiarity of inflammation of the lungs in childhood. Double pneumonia is also more frequent in early life; but when only one lung is affected, it is most frequently the right—a rule that applies also, you know, to the adult. Pneumonia, however, sometimes, instead of affecting the whole lung or the whole of one lobe, seizes on single lobules, and is then known by the designation "lobular," the frequency of which condition, however, has been much exaggerated. M. Bouchut gives perhaps the best description of the pathological appearances of this variety: "On opening the chest," says he, "the lungs slightly collapse. They are heavier than the natural state, and offer little crepitation. Their surface preserves at the situation of the diseased parts a granite-red tint, which results from the union of a considerable number of reddish spots of different gradations of color. Each spot represents a lobule, the degree of congestion of which is different, and corresponds with more or less partial induration of the pulmonary tissue." We have in each lobule, in this variety, the same stages of engorgement of red and of grey hepatization, that we find occupying whole lobules in other cases.

Original Communications.

POST-MORTEM EXAMINATION IN A CASE OF CYANOSIS.

By JNO. T. HODGEN, M.D.

In the spring of 1848 I accidentally came in contact with a child presenting in a marked degree all the symptoms and appearances of cyanosis, and on the fourth day of March, 1863, was called by Prof. John B. Johnson to make a post-mortem examination on the body of the same, then a young lady of 19 years. I received from Prof. J. the following history of her last illness:—

She had never suffered from any disease of serious character. She had been, by the constant care of her parents, remarkably careful in all her habits, had all her life avoided active exercise, and was generally comfortable.

Prof. Johnson was called to see her after three days' sickness from severe pain in the head. These attacks of headache not being unusual, no anxiety had been felt in regard to her until the second day, when the mother desired to call a physician, but this was not approved by the patient, who remarked that it was nothing and would soon pass off. When the Doctor first saw her, Feb. 24th, the lips, cheeks, and hands, were of their usual blue color, and cool; eyes injected, and a papular eruption on the forehead, the centres bright red, and the margins dark blue (this eruption had been present for several years); breathing difficult; heart's action frequent and irregular, 96 to 102 per minute; pulse small, and corresponding in frequency and irregularity with the heart's action; bronchial cough; the second sound of the heart short; bruit de soufflet distinct on left side, diminishing in intensity in passing to right; intolerance of light and sound; sickness at stomach, and constipation. Directed oleaginous mixture, also fluid ext. valerian in case she should not rest. Acidulated drinks and quiet in dark room. Feb. 25.—Had spent a restless night; the bowels had moved; pain in the head still severe; could lie only on the left side; had slight fever. Directed effervescing mixture, and repeated the sedative. Feb. 26.—Pain in the head continues, increased by motion; tongue furred and dry; nausea and vomiting. Directed two compound cathartic pills. Feb. 27.—Bowels have moved; less pain in the head; more quiet; desired to be left alone; no fever; extremities cool; quite weak. Directed elixir calisayæ. Feb. 28.—Pain in the head more intense; nausea, and had vomited two tablespoonfuls of dark blood; sense of suffocation; pulse small and frequent; skin relaxed; mucous râle distinct in left posterior chest; had slept profoundly; intellect always clear. Directed sinapisms to epigastrium, and enemata. March 1.—No motion from the bowels; much as on the previous day, except weaker. Directed carbonate of ammonia, with elixir calisayæ; repeated the enemata. March 2.—Less pain in head; pulse feeble; mucous râle distinctly heard when standing near the bed; blueness of surface intense; disposed to sleep. Treatment continued. March 3.—Bowels had moved; pain in head less; mucous râle distinct; had vomited three tablespoonfuls of dark blood; nausea continued; pulse feeble and irregular; hands cool and blue; mind clear. Continued stimulants, with wine. Sinking all day; grew rapidly worse, and died at half-past two A.M., March 4th.

Post-Mortem Examination, thirteen hours after death.—The skin darker than usually found at that period after death; this discoloration more intense on the dependent parts of the body. General development good; chest small, but regularly formed; little emaciation. Liver large and dark-colored; pericardium containing more than an ounce of serum of normal appearance. Lungs small and dark-colored as those of a subject of sixty, and filled with dark blood. Heart weighing nine ounces, with more than the usual amount of fat on its surface, though not mingled with its tissue; the apex formed by the right instead of the left ventricle, the walls of the right being double the thickness of the left; the ventricular septum incomplete at the upper part, leaving an opening large enough to admit a man's thumb; this opening clearly below the mitral and tricuspid valves. The opening leading from the right ventricle into the pulmonary artery not larger than a goose-quill, with two imperfect semilunar valves; between these (which were united by what should have been their free margins) is the oblong opening before mentioned between the ventricle and pulmonary artery; the walls of the pulmonary artery as thin as those of a vein, and its calibre not more than two-thirds the normal size, and this rapidly diminishing as the branches are given off. The foramen ovale closed by its valve, except at one point, where the valve overlapped the margin of the opening, but left an oblique fissure as large as a crow-quill. The aorta normal in size and thickness, one of the coronary arteries being given off one inch above the free margin of the semilunar valve, the other retaining its valve at its usual place.

FRACTURE OF THE SKULL

BY BLOWS FROM THE FIST (?)

By ALFRED MERCER, M.D.,

SYRACUSE, NEW YORK.

W., aged 46, of intemperate habits, in an affray with A., aged 26, received injuries of the head at six P.M., Wednesday, July 22d, of which he died on Saturday morning, July 25th, sixty hours after receiving the injury.

A. is six feet high, weighs 160 pounds, has a long arm, and a heavy, bony fist. It is claimed that W. first struck A., and that A. at this time had a common nail hammer in his right hand, which he at once shifted to his left, and then struck W. with his right fist. This is A.'s statement, and it is corroborated by two witnesses who were within a few feet of the parties. W. received three blows. The second staggered him back against a fence; the third brought him to the ground, blood flowing freely from nose and mouth. W. soon recovered himself, and proceeded to finish milking a cow, at which he had been engaged previous to the altercation. He was, however, persuaded to go home, a short distance, to wash himself and change his clothing, which he did. A witness who assisted in this observed no injury about the left temporal region. In the course of the evening he gradually became insensible, in which state he remained till he died.

A surgeon saw him late on the evening of the injury. The left temporal region was very much tumefied, so much so that he was in doubt as to there being a fracture; however, the skull was cut down upon Friday evening, fifty hours after the injury, when a fracture was discovered, with depression of the bone. The trephine was used, and the bone elevated, but there was no mitigation of symptoms. The surgeon could find no breaks in the skin, nor any defined mark of a blow.

Thirty hours after death, assisted by Dr. A. B. Shipman, I made a post-mortem examination of the body. A crucial incision, three or four inches in extent, had been made over the temporal region for surgical purposes. The temporal muscle and the whole temporal region were completely engorged with blood, but there was no special mark to indicate what kind of implement produced the injury. The skull was found fractured in an irregular oval form. Starting just back of the anterior temporal ridge, it extended backwards two and three-quarter inches, and was one inch and seven-eighths in its greatest width, the lower margin of the fracture being three-eighths of an inch above the external meatus. The fracture thus involved the frontal bone, the greater wing of the sphenoid, about half of the squamous portion of the temporal, and the lower anterior corner of the parietal, this fragment being about one inch in length and half an inch at its greatest width. The bones in this circle were broken into eight distinct pieces, none of which were removed in the operation of trephining.

Beyond this breaking in of the bones, a fissure extended backwards through the squamous portion of the temporal bone to the posterior temporal ridge, and another extended nearly to the centre of the supra-orbital plate, starting from its outer posterior angle. A large clot had formed between the skull and the dura mater, extending over the greater part of the side of the head. It firmly adhered to the membranes, which were uninjured, and must have weighed three or four ounces. The brain was perfectly healthy. A little more than a semicircular disc of bone had been removed by the trephine, the coronal suture passing through the disc a little anterior to its centre. The upper margin of the fracture was driven square down on the brain, and these fragments were larger and thicker than the lower ones. The skull, I think, is unusually thin; five of the fragments piled on each other measure the least trifle over a quarter of an inch, though at one point of the fracture it measures about one-eighth of an inch.

Questions might be raised as to the surgical treatment of the case, but more interest is attached to its legal phase—Whether the injury was inflicted by the fist without malice, or with the hammer with murderous intent. Could the fist have produced such a fracture? Could the hammer have done the mischief without causing more injury to the scalp? Can any of your numerous readers, with illustrative cases, throw any light on the subject?

A.'s fist was examined four days after the blows were given. There was a small cut on the knuckle of the middle finger of the right hand, which was large and prominent, and some abrasion of the skin on the first joint of the little finger. At this time there was very little swelling about these injuries. I have seen many worse-looking hands where they had caused much less injury. It is not certain whether these blows were given through a hat. W.'s hat was of pretty heavy straw, and was uninjured. Most likely the hat was off when some of the blows were received.

CASE OF SUCCESSFUL

REMOVAL OF FOREIGN BODY IN THROAT

BY TRACHEOTOMY.

By WILLIAM M. McDOWELL, M.D.,

CANTON, FULTON CO., ILLINOIS.

SARAH HANKS, six years old next August, and daughter of Mrs. Ladicia Hanks, a widow of Canton, Illinois, while engaged in recreation at noon with her school-playmates on Wednesday, the 18th of March, 1863, was in the act of laughing heartily, with her head inclined backwards, with a large grain of corn in her mouth; during inspiration the corn passed through the glottis into the trachea, giving rise to the usual alarming symptoms. She immediately fell down with distressing indications of suffocation, frightening her associates, and inducing them to think she was dying. She was soon conveyed home, and her mother sent for her physician—a Hahnemannian. The means he employed were confined to the administration of sugar-pellicles, hopeful, we suppose, that the grain might be ejected in coughing, and his fanciful agents have the credit of causing its expulsion. The mother becoming apprehensive for the safety of her child from these frequent paroxysms of coughing, called in another medical adviser, who confided in the administration of errhines and emetics. Being ignorant of the necessary procedure herself, and influenced by the pernicious counsels of others, she permitted the little sufferer to remain in this distressing condition until the 31st of March—the fourteenth day of her troublesome affliction—when I was consulted in regard to her condition, and recommended extraction, as the only probable salvation, which from the ravages which had been made was apparently a forlorn hope. The mother informed me she was frequently advised not to permit the operation, as it was extremely hazardous, but, as the child was failing so rapidly, she was willing it should be resorted to, and gave a deplorable history of her condition from the time the corn entered the trachea:—That her voice soon failed to a hoarse, low wheezing whisper; she could not recline in bed, but had to be held up in a sitting posture; was thirsty, and drank frequently, very little at a time, and she was confident did not take more nourishment than two tablespoonfuls of rice, and did not sleep at all during this time; was so irritable when spoken to as to strike at the person addressing her. Paroxysms of coughing and dyspnœa were frequently renewed, and continued for several hours at a time. The child, on the thirty-first, was extremely emaciated and prostrated; pulse feeble and accelerated; eyes dull and languid; face of a pale dusky appearance. Drs. Ingersoll, Martin, Fleming, and Searles were invited in, and one of the number decided against the operation, as in his opinion there was no prospect of saving the child. The remaining four of us decided that the prostration and symptoms of marasmus left scarcely a hope, and, as tracheotomy afforded the only chance, the child should have this, dim as it appeared. Being very irritable and excitable she was put under the influence of chloroform, and an incision was made just below the cricoid cartilage in a perpendicular direction, approximating the top of the sternum, dividing the superficial and deep fasciæ and cellular structure at the junction of the sterno-hyoid muscles; then, with the point and handle of the knife their connexions were separated, and the trachea laid bare. With a small scalpel two rings were opened. On this there followed a discharge of muco-purulent matter tinged with blood. We waited for half an hour, expecting every moment the corn to be ejected, when a director was introduced, and the back of the scalpel glided along the groove, and another ring was severed. The director was moved over the sides and superior portion of the windpipe, and withdrawn with the handle depressed upon the sternum, pressing the instrument moderately in contact with the anterior portion as it was extracted, which brought with it a considerable portion of adventitious membrane and the grain of corn. Laryngo-trachitis had evidently been created by this foreign body, resulting in a pseudo-membranous formation, and the corn may have been resting on it or entangled in it.

But little hæmorrhage was encountered, and as soon as it entirely ceased the aperture was closed with strips of adhesive plaster. The aperture is now closed and healed. The result of this operation was unexpectedly satisfactory and successful. Repose and a vigorous appetite rapidly developed the child's physical condition, and those who had seen her enfeebled and emaciated, in a few days after her relief did not know her, recovery being so speedy. The child is completely restored to health. In connexion with this case we may contemplate two important achievements worthy of favorable consideration.

If we should be called to a similar case, when, from circumstances over which we have had no control, valuable time has been lost, and the case is apparently beyond the prospect of hope, we should have no hesitation in opening the trachea. The case just narrated affords additional corroborative testimony demonstrating the advantage of tracheotomy for the removal of preternatural membranous formations in laryngo-trachitis.

Reports of Hospitals.

GENERAL HOSPITAL NO. 3, LOUISVILLE, KY.

BROMINE IN HOSPITAL GANGRENE.

By J. A. DOUGHERTY,

ACTING ASSIST.-SURGEON, U.S.A.

Joseph H. Richardson, a private of Co. D, 3d Ky. Infantry, was transferred from Hospital No. 5, Nashville, to this hospital, March 12, 1863. At the time of admission he was suffering pain in the left temple, impaired sight of the left eye, constipation of the bowels, and a feeling of general prostration, the effect, as we supposed, of an attack of erysipelas of the face and neck which he had about the latter part of December while on duty as nurse in Nashville.

He was treated by Dr. Fischer, under whose charge he was placed, and by the first of June was so far improved as to be able to do guard duty at the hospital. He complained occasionally, however, of vertigo, feeling, as he said, as if he were half drunk. July 5th, about five o'clock p.m., while walking in the yard, he fell down in something like an epileptic fit, and was carried into the ward, where he remained for several days in a state of unconsciousness. On the fourth day after the attack, when consciousness had fully returned, he complained of pain and tenderness at a point about three inches below and to the right of the articulation of the lumbar vertebræ with the sacrum. Upon examination, a spot was found about two and a half inches in diameter, of a dark red color, appearing much like an ordinary bed-sore. On the next day, the 5th, the spot appeared somewhat larger, of a darker color, with fluctuation and crepitation upon pressure; dressed with flaxseed poultice. Sixth day.—Fluctuation and crepitation increased; surface black and puffed up; evidently in a state of mortification. Dr. F. laid open the dead mass with a scalpel, when a quantity of fœtid gas, with nearly a pint of dark, offensive, watery fluid, escaped. The odor was like that emanating from mortifying parts. He then injected the cavity with a solution of bromine—one part of the compound solution to four of water. Seventh day.—Removed part of the dead mass, and filled the cavity with lint saturated with the compound solution. Eighth day.—Removed remaining mass, and, having obtained some pure bromine, applied it by means of a mop twice a day. When the whole of the dead matter was removed, it left an enormous cavity, little, if any, less than a pint bowl, the whole depth of the glutei muscles having sloughed away, leaving three or four square inches of the ilium and sacrum exposed. Ninth day.—Sloughing seemed arrested over the greater portion of the surface, but at a few points appeared to be still going on. Bromine continued. Tenth day.—Sloughing arrested and granulations appearing. Compound solution of bromine substituted for pure bromine. The general treatment was supporting, and from that time forward the case has improved as rapidly as could be desired, the cavity filling up finely.

Was this a case of hospital gangrene, or of ordinary gangrene and mortification? At first it presented all the features of ordinary gangrene, but after the mortified mass had been removed the surface had the appearance and odor of hospital gangrene. There had been no hospital gangrene in the house for two months, and never any in the ward in which this patient was. The parts might have been bruised while the patient was in the fit. At any rate, he diseased action seemed to yield promptly to the application of the *pure* bromine as soon as the dead mass was removed.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, Feb. 18, 1863.

DR. JAMES ANDERSON, PRESIDENT, IN THE CHAIR.

DISCUSSION ON STRANGULATED HERNIA.

(*Continued from page 75.*)

DR. BUCK—CASE II.—*Inguinal Hernia; Strangulated Stricture of the Sac.*—Thomas Starboard, colored seaman, native of West Indies, 31 years, admitted into N. Y. Hospital on Friday, Dec. 19, 1862, at half-past two o'clock P.M., with a strangulated inguino-scrotal hernia of the right side, of which he gave the following account:—

About three weeks before, and soon after a violent straining effort, he first noticed a small swelling in both groins. That in the right groin increased from day to day. Both could easily be reduced into the abdomen until the preceding Wednesday evening, when patient was unable to replace that of the right side.

Symptoms of strangulation soon manifested themselves, and have continued up to the time of his admission into the hospital. The tumor fills the scrotum and occupies the right groin; the testis lies at the bottom of the scrotum in loose contact with the hernial tumor; a recent chancre occupies the prepuce; and a subcutaneous abscess of the size of a dollar is situated over the neck of the tumor. The tumor itself is very tense and unyielding, though the skin and subjacent tissues covering it are supple and unadherent. The belly is but little distended. At half-past four o'clock P.M., after having unsuccessfully employed the taxis, proceeded to the operation without the administration of anæsthetics.

Operation.—An incision four inches in length was made over the axis of the tumor, extending equally above and below the Poupart's ligament, and passing through the abscess noticed above. On reaching the surface of the tumor, the layers covering it were raised at a point below the external ring and successively detached upwards with the handle of a scalpel and the end of the forefinger, until at length a layer was reached, which, on being traced towards the ring, allowed the finger-nail to engage itself under the edge of the intercolumnar fascia which constituted the stricturing part. Cooper's hernia knife was conducted on the finger-nail, and its blunt front inserted flatwise under the stricture, and the cutting edge directed forward, care being taken to maintain the knife in a line with the axis of the body.

The handle being now elevated from the body, the division of the stricture was effected by the pressure of the cutting edge against it. All the stricturing parts being thus divided, the neck of the sac was exposed to view. The taxis was now employed to reduce the contents of the sac into the abdominal cavity, but without success, though the tension of the tumor diminished under the manipulation. A careful scrutiny of the sac detected the existence of a stricture in the sac itself. The seat of it was indicated by a superficial groove or furrow encircling the neck of the sac, and corresponding to a falx-like incomplete septum in its inner surface. The sac was opened to the extent of one inch and a half through the stricture, after which its contents were easily returned into the cavity of the abdomen, and without any direct handling of them.

The wound was closed with sutures and adhesive plaster, over which a compress and spica bandage were applied to complete the dressings. Warm emollient poultices were ordered over the whole abdomen. Pil. opii, No. ij., each gr. j., to be taken immediately, and followed by one pill every hour. Dec. 20, nine o'clock A.M.—Passed a quiet night; pulse 132; no abdominal tenderness; continue opium. Five o'clock P.M.—A good deal of tenderness on pressure over the right iliac region. Ordered two dozen leeches. Cap. pil. opii No. iij. qu. 3 horas: pulse 130. Dec. 21, nine o'clock A.M.—Is in a state of moderate narcotism; pulse 128. Ordered, in addition to opium, tinct. veratri viridis, gutt. iij. every four hours, to be gradually increased to five drops. The opium and verat. viride to be alternated two hours apart. Dec. 22.—Pulse 120. Continue pil. opii as before, increase tinct. verat. viridis to gutt. iv. every four hours; tenderness of abdomen diminished; wound sloughy; removed sutures. Ordered yeast dressings; three P.M., stopped opium. Dec. 23.—Pulse 108; bowels freely open yesterday. Dec. 25.—Pulse 80; wound doing well; his subsequent progress was favorable, and resulted in complete recovery. Discharged from the hospital.

CASE III.—*Inguinal Hernia Strangulated.*—Philip Pain, aged 50 years, Germany, laborer, of good constitution and habits. Admitted into N. Y. Hospital on Friday, Jan. 9, 1863, at one P.M., with strangulated inguinal hernia of the left side. About two years ago his hernia first appeared, in consequence of a violent effort in lifting. Though he has worn a truss habitually, it has not prevented the occasional descent of the hernia, especially when patient made unusual exertion; he had always succeeded, however, in reducing it himself, even after it had remained down an hour or more. On the day before his admission, while lifting a heavy weight, his hernia was forced down and could not be returned: a feeling of great tension in the tumor and its neighborhood immediately supervened, with pain around the umbilicus, and nausea. The following morning vomiting commenced and continued uninterruptedly. Two physicians had made unsuccessful attempts at reduction by taxis, after which he was brought to the hospital. The tumor, occupying the left groin and scrotum, was of the size of a large goose-egg; the testicle was in loose contact with it at the bottom of the scrotum; the skin at the lower part of the scrotum was reddened but still supple, free from œdema, and unadherent. In handling the tumor a peculiar sensation of crepitation is felt, and even heard, similar to what is noticed in a hydrocele a day or two after it has been injected with iodine. Pulse 85; tongue slightly coated; surface normal. No time was lost in resorting to the operation.

Operation.—At two P.M., without anæsthetics. An incision four to five inches in length, extending equally above and below Poupart's ligament, was made in a line with the axis of the tumor, and the successive layers were divided until the intercolumnar fascia was brought into view. It was found exceedingly tense, as it spanned the neck of the sac, and constituted the inferior portion of the constricting part. This was divided by insinuating the hernia knife flatwise under its inferior edge, and then directing the edge of the knife forward against the constricting band. The division was continued in the same manner upwards through the entire constricting portion. The tumor became relaxed, and the crepitus already mentioned was no longer felt in handling it. The contents of the tumor, now only covered by the inclosing sac, were observed to be very firm and fleshy. They could not, however, be reduced by the taxis, notwithstanding the complete division of the superjacent stricturing parts. There remained now no alternative but to lay open the sac, which was done freely. The fluid that escaped was small in quantity. A knuckle of small intestine alone occupied the sac, and adhered to it at its lower part by a small single band that easily gave way on slight traction. The intestine itself was very much thickened and fleshy, and admitted of only a slight degree of compression, to which, no doubt, is to be attributed the impossibility of reducing it before opening the sac. Two spots that could be covered with the end of the finger existed near each other on the surface of the gut, of an indented appearance, and surrounded by a deep red congested color of the bowel. Difficulty was still experienced in attempting to reduce the hernia, and was not overcome until a further incision was made higher up through the neck of the sac. The reduction being accomplished, the wound was closed with sutures and adhesive straps, and the dressing completed by a compress and spica bandage. This patient survived the operation about seventy hours, and died of peritonitis.

At a *post-mortem operation* the small intestines were found adherent to each other and to the abdominal parietes in the left iliac region by recent lymph, which permitted them to be separated by slight traction. After disentangling these parts, the portion of incarcerated gut was recognised as being fifteen or eighteen inches distant from the ilio-cœcal valve; and though no marks of actual disorganization were found, yet this portion and the portion above it for a distance of ten or twelve inches were deeply congested, and at different points presented ecchymotic patches under the peritoneal coat. The knuckle that had constituted the hernia, and which has been already noticed as thickened and fleshy, presented this thickened condition along the line where the mesentery separates to surround the gut. Here an interstitial deposit, evidently of old formation, had taken place, constituting a dense structure, which, when cut into, appeared to be almost of scirrhous firmness. It was this thickened, indurated condition which had prevented the return of the hernia after the division of the stricture, and which had probably been produced by slow inflammation, induced by the repeated descent of the hernia behind the truss.

Case IV.—*Femoral Hernia Strangulated.—Operation.*—Joanna Shadcrwill, 43 years, Germany, married. Of slender, delicate constitution. Admitted into N. Y. Hospital Saturday, Jan. 24, 1863, at one o'clock p.m., with strangulated femoral hernia of the right side. Patient had been aware of the existence of the hernia for about seven months, and, as she supposed, had been able always to reduce it completely. On the Tuesday evening preceding admission, symptoms of strangulation appeared, such as vomiting, pain in the umbilical region, and constipation, and have continued with but little intermission to the present time. On the day before admission the taxis was attempted and persevered in for two hours, patient being under the influence of chloroform, but without success. The tumor spreads out over the inner half of Poupart's ligament, is diffused, and without well defined limits. The skin covering it presents a red blush, and adheres to the subjacent tissues. It is thickened, and no longer can be gathered up into folds between the thumb and fingers. The parts are tender to the touch, and of increased warmth. The belly is moderately distended and supple. The operation was resorted to without further delay, as follows:—

Operation.—Patient under ether; pulse 120. An incision five inches in length was made across the tumor, parallel to Poupart's ligament, and continued through the several tissues till the surface of the sac was exposed. All the tissues divided were found infiltrated with coagulated lymph. The upper edge of the incision was next divided at right angles, thus constituting an inverted ⊤ incision. This greatly facilitated getting access to the seat of the strangulation, at the upper and inner side of the seat of the neck of the tumor. By dividing successive layers of the sac and tracing them up to the point where the tumor emerges from the femoral ring, the forefinger nail was at length insinuated under the edge of the ring, and served to conduct the probe-pointed bistoury flatwise between the sac and the stricturing ring. The edge of the knife was then directed forward and towards the median line against the stricture, thus dividing it in the act of elevating the knife handle. The end of the little finger was then insinuated in contact with the neck of the sac through the divided structure, stretching and enlarging it. The taxis being tried, produced no other effect than to relax the tension of the tumor. It was now discovered that the sac itself could not be gathered up between the thumb and finger, nor made to glide upon the parts within, from which it was inferred that adhesions had taken place between the sac and its contents. On opening the sac only a small quantity of turbid fluid escaped. Extensive adhesion, evidently not of recent formation, united the sac to the hernia, requiring great care in separating them. This was effected with the handle of the scalpel and finger-nail, after long and patient manipulation. The hernia itself was of a deep livid red color, and presented several points that were at first taken for perforations. After considerable handling, what lay in view and had been taken for bowel proved to be omentum, which covered and concealed a knuckle of small intestine of the size of the last phalanx of the thumb. This also was very livid, and presented upon its surface a depressed spot of a greyish color, looking very much like incipient disorganization. It was readily reduced. The omentum being unravelled and spread out, covered a surface six inches long and one and a half wide. This was excised, and two fine ligatures applied to the excised edges. With the fore-finger passed up through the crural canal, it was ascertained that everything had been reduced and lay free within the peritoneal cavity. The wound was closed with sutures and adhesive straps, over which a compress and spica bandage were applied to complete the dressing.

Treatment.—Large flaxseed poultices to the abdomen ordered. Pil. opii, each of one grain, of which two to be taken at once, and to be followed hourly by one or two *pro re nata.* Jan. 25, ten a.m.—Patient passed a comfortable night; no vomiting; pulse 113, occasionally intermitting; epigastrium tender under pressure. No tenderness in right iliac region. Drowsiness; pupils contracted. Op., gr. xxvij., taken in last twenty-four hours. Ordered one dozen leeches to epigastrium and poultices continued. Jan. 26.—Progress favorable; pulse 106; respiration 11; epigastric tenderness diminished; opium continued. Jan. 27, nine a.m.—Pulse 108; respiration 12. Opium continued. Pus escapes from wound. Removed dressings; applied sol. sodæ chlorat. Nine p.m.—Pulse 130; respiration 13; vomiting of dark-colored fluid. No pain. Jan. 28, ten a.m.—Pulse 128; respiration 10; bowels moved spontaneously; opium continued; wine-whey ordered. Three o'clock p.m.—Vomiting continues. Jan. 29, ten a.m.—Has taken no opium since two p.m. yesterday, except tinct. opii, gtt. xl. Pulse 114; respiration 12; brandy substituted for wine-whey. Introduced a catheter. Jan. 30.—Good night; pulse 102; tongue and surface in better condition; urination less difficult; wound open and suppurating freely. Jan. 31.—Pulse 92; no pain; very little tenderness in the region of the wound. Feb. 1.—Pulse 88; bladder and bowels perform their functions without aid. Nourishment and stimulants given as freely as can be borne. Feb. 2.—Less comfortable; night, pulse 108. Feb. 3.—Pulse 112 at eight a.m.; seven p.m., 124; profuse sweating. Quinine, brandy, and beef-tea ordered. Feb. 5.—Pulse 116; profuse sweating; fever; dark grumous fluid discharged from the wound. Feb. 6.—Growing weaker; pulse 124; vomiting this a.m.; can retain scarcely anything on the stomach. Feb. 7.—Pulse 120, weak; vomiting continues; patient delirious; sweats profuse. Feb. 8.—Some sleep; pulse 128; thready subsultus; discharge from wound offensive. Feb. 9.—Pulse 135, hardly perceptible; state of collapse. At half-past eleven p.m. died.

Feb. 10.—*Post-Mortem Examination, sixteen hours after death.*—Rigor mortis well marked. The peritoneal cavity being laid open, the large intestine and also the small intestine, except the ilium, were found much distended; no adhesions except those to be noticed hereafter. No effusion into the peritoneal cavity; no exudation of lymph on the peritoneal surface. The omentum at its inferior portion is gathered up into a band that was found adherent to the margin of the track through which the hernia had descended along the femoral canal. At about eight or nine inches from the cœcum the convolution of the ilium began to be adherent, throughout an extent of twelve or fifteen inches, to each other and to the parietes of the pelvis around the femoral canal. The moderate degree of traction necessary to disentangle the parts ruptured the gut and allowed the escape of its contents. These adhesions were firm and evidently organized. No escape of fæcal fluid had at any time been observed from the groin. The intestinal track through the adherent convolutions was very much narrowed, and had doubtless much impeded the passage of their contents.

CASE IV.—*Strangulated Femoral Hernia.*—Mary G., children's nurse, England, 39 years, widow, mother of one child; was taken on the 14th of January, 1863, in the evening, with nausea and pain in the abdomen and right groin, soon succeeded by vomiting which continued through the night. Her mistress had administered cathartic pills and other remedies, and made outward application for the relief of what she supposed a bilious attack. She was known to have had a rupture in the right groin for several months previous. At eleven A.M. on the following day, when first visited, she was suffering severe pain around the umbilicus, aggravated by paroxysms, and had frequent vomitings. Countenance anxious. On examination, a tumor of the size of a small flattened pullet's egg was found in the right groin, covering the inner half of Poupart's ligament, very movable, allowing the fingers to be insinuated under it; free from adhesions and redness of the surface. Handling causes patient to complain of great tenderness. The belly is soft and supple, pulse 88, surface of natural temperature. Patient for the last few weeks has undergone unusual fatigue in the care of a very sick child, and of late has experienced pain at the seat of the rupture while carrying the child in her arms. To this over-exertion she attributes her present accident. Suffering no annoyance from the rupture, she had never worn a truss. Ordered a bladder filled with cracked ice to the groin, to be continued until two P.M., when the patient was etherized preparatory to a trial of the taxis, and in case of its failure, to an operation. The taxis was thoroughly tried, but without success; the operation was then resorted to.

Operation.—An incision four inches long was made across the tumor, parallel with Poupart's ligament; a second incision divided the upper edge of the first through its middle, thus constituting an inverted ⊤ incision. The subsequent procedure was the same as in Case IV. After the division of the stricture exterior to the sac, the reduction was easily accomplished. There still remained, however, in the sac a portion of what seemed to be a small process of omentum adhering to the sac.

The sac itself, with its contents, was now pushed back through the crural canal into the abdominal cavity, and left there. The external wound was closed with sutures, adhesive straps, compress, and spica bandage. Flaxseed meal poultice was ordered to the lower abdomen. Two grains opium to be taken statim, and one grain every hour after. Her subsequent process was favorable, and her recovery complete. Within a fortnight after getting about, an inguinal hernia showed itself in the right grain. A truss was adapted to it and worn constantly, with the desired effect of keeping the hernia reduced. About the end of March, patient called to report that the tumor in the left groin, which had remained reduced since the operation, had reappeared, making it necessary to wear a double truss.

CASE VI.—*Strangulated Femoral Hernia.*—Monday, March 23, 1863, visited Mrs. D., at No. 32 Horatio street, a patient of Dr. Sharrock, a hard-working woman, aged 40 years, suffering from femoral hernia of left side, strangulated for about twenty-two hours. She had attended church twice the day before. At about six o'clock P.M. she was attacked with vomiting, which has continued since, accompanied with severe pain, referred chiefly to the epigastric and umbilical regions. The hernia had existed about one year. She had never worn a truss. The tumor had always disappeared in the recumbent position. Four o'clock P.M.—Countenance calm; pulse 94; temperature natural. Vomiting is provoked by every attempt to drink. Belly supple, not distended; tender on pressure over epigastrium and umbilicus. Tumor of size of half a hen's egg in left groin, covers inner half of Poupart's ligament, movable; its cover supple, unadherent; tender on being handled. Dr. S. had taken a quart of blood from the arm at midnight, had made some efforts at taxis, and had administered opium.

Operation.—Administered ether, and tried the taxis thoroughly, but without success. Thereupon proceeded to operate. A single incision, four inches in length, across the tumor, parallel with Poupart's ligament, allowed the sac to be exposed; proceeding then as in Cases IV. and V. the constricting band on the inner side of the neck of the tumor was got at and divided. The end of the finger was then thrust into the crural canal by the side of the neck of the sac, and its dimensions stretched. The contents of the sac were now easily pushed up into the cavity of the abdomen, and the sac itself reduced after it. The wound was closed and dressed as in the preceding case. The after-treatment was also the same. The subsequent progress of the case requires no particular record; it resulted favorably, so that at the expiration of four weeks the patient was allowed to leave her bed and resume her accustomed occupations, with a suitable truss adapted to support the parts.

Of the six cases above narrated three were inguinal hernia in males, and three femoral in females. Three cases, two inguinal and one femoral, resulted fatally. Three cases, one inguinal and two femoral, recovered. In all the cases the division of the stricture exterior to the sac was previously accomplished, but in three only could the reduction of the hernia be completed without opening the sac. Of the three in which the sac was opened, one (inguinal, No. II.) recovered, and two (one inguinal, No. III., and one femoral, No. IV.) died. Of the three in which the sac was not opened, one (inguinal, No. I.) died, and two (femoral, Nos. V. and VI.) recovered. Of the three cases in which the sac had to be opened, the condition rendering it necessary was, in Case II., a stricture of the sac itself, in Case III. chronic thickening of the coats of the incarcerated gut, and in Case IV. extensive adhesions of the sac to the contained viscera. Of the three fatal cases, one of scrotal hernia (No. I.) fell into collapse, and died at the expiration of seventy-two hours after the operation. One of inguinal (No. III.) from general peritonitis. One of femoral (No. IV.) died on the twenty-first day from obstructions reproduced by entangled adhesions of the omentum and several nooses of ilium to each other and to the walls of the pelvis, around the upper orifice of the crural canal. The experience afforded by these six cases may, it is believed, be regarded as favorable to the mode of operation employed. No advantage claimed for the other more usual method, which in all cases contemplates a free opening of the hernial sac, is sacrificed thereby. When it is ascertained, after the previous division of the stricture, that the reduction of the hernia is impracticable, the laying open the sac still remains as our final resource. If the obstacle to reduction is found to be a stricture of the sac itself, this may be divided by a small incision, and the reduction may then be accomplished (as in Case II.) without any direct handling of the bowel or considerable exposure of its surface to the air.

In the other conditions met with in Case III., thickening of the incarcerated gut, and in Case IV., of extensive adhesions between the sac and contained viscera, these obstacles were overcome with no less facility than if the sac had been laid open in the first instance. The great advantage of the method here advocated, when applied to large herniæ, which are often irreducible from old adhesions, cannot be doubted. The liability to peritoneal inflammation from the exposure of so extensive a surface of bowel as is unavoidable in opening the sac, is by this method immensely diminished. In Case I., which was of this class, fatal peritonitis, it is believed, would have been inevitable; and though a favorable termination did not follow the operation, a post-mortem examination ascertained that there were no traces of peritoneal inflammation.

The most weighty objection made to this method is the danger of reducing the gut, already in a state of gangrene, and thus exposing the contents of the bowel to be extravasated into the peritoneal cavity. If rupture of the gut has already taken place in consequence of gangrene, a corresponding condition of the sac and its coverings will disclose it to the operator, and determine him to lay open the sac and expose the state of its contents. Where, however, rupture has not taken place, and only signs of commencing disorganization are present, we have high surgical authority for returning the gut even in this condition, for the reason that after the return of the bowel within the cavity of the abdomen, adhesions will take place around the disorganized part in advance of its giving way, and thus shut off communication with the peritoneal cavity and prevent extravasation into it.

Progress of Medical Science.

PREPARED BY E. H. JANES, M.D.

ASSIMILATION OF THE LACTATE OF IRON.

The superiority of the lactate over the other chalybeates, in reference to digestion, is the subject of a communication to the *Dublin Medical Press*, from A. Cordier, M.D. Not only clinical observation, but recent physiological facts and experiments, are summoned to prove the eminent value of this preparation. That lactate of iron is formed in the human stomach is proved by digesting for twelve hours, at a temperature of 104°, some iron filings with distilled water and calf's rennet. Hydrogen is disengaged, and lactate of iron formed, it being lactic acid upon which depends the acidity of the gastric juice. It has also been shown that lactate of iron may be injected into the veins in large quantity without producing any accident. It combines readily with the albuminous fluids, and is readily assimilated without fatiguing the stomach, improving rather than impairing the appetite and digestion. Thirty grains of reduced iron, or of the sesquioxide, even when taken at meals, produce diarrhœa and vomiting, which appears to be due to the stomach having first to dissolve and transform these preparations into lactates, while if the lactate is received into the stomach already formed, no such inconvenience follows. Recent experiments have been instituted to ascertain the degree of digesting attending the lactate as compared with other preparations of iron. "One drachm of fibrine, and two and a half of fresh gastric juice of a dog, mixed and kept for six hours at a temperature of 104°, the fibrine is dissolved and completely transformed into albuminose. But if one introduces at the same time any substance antagonistic to the action of the gastric juice, the fibrine is not, or only partially digested. In order to ascertain the degree of digestion, three consecutive tests are employed:—Boiling, Barreswill's liquor, glucose added to Barreswill's liquor. If digestion has been completed, the obtained produce does not coagulate at 212°, turns into deep violet when boiled with Barreswill's liquor, and prevents this liquor being reduced by glucose. But if digestion has not taken place, the obtained produce is not turned into violet by Barreswill's liquor, and glucose readily reduces the liquor." Dr. C. has applied these tests to the different preparations of iron, with the following result:—with lactate of iron, digestion complete; with tartrate of iron and potash, citrate of iron, pyrophosphate of ammonia, digestion well; with three-twentieths of a grain of reduced iron, complete; with six-twentieths, incomplete digestion. These and other experiments are presented to prove that the lactate of iron—especially the pastils of MM. Gilis and Conte—is the most digestible of all ferruginous preparations.

Mr. E. J. Reynolds read a paper before the Royal Dublin Society on

WOOD SPIRIT AND ITS DETECTION.

When studying the deportment of various metallic salts with purified wood spirits, Mr. Reynolds observed that when a solution of the chloride of mercury was mixed with a few drops of the spirit, the mixture warmed, and the excess of caustic potash added, the oxide of mercury first thrown down is redissolved with the production of a clear solution. When acetic acid was added in excess to the alkaline-solution, a bulky, white, gelatinous precipitate was produced, but slightly soluble in dilute acetic, nitric, or sulphuric acids, though readily dissolved in hydrochloric acid, which appears to decompose it. This precipitate was found to be composed of mercury with an organic body. The only test hitherto proposed for the detection of wood spirit is that generally known as "Ure's test," which consists in simply adding to the suspected spirit powdered hydrate of potash, when, if wood spirit be present, the mixture becomes brown in half an hour. This, though a simple, easy, and correct test, Mr. Reynolds thinks is exposed to a serious objection when applied to the detection of wood spirit in alcoholic tinctures, from the fact that most of them contain some volatile principle extracted from the plant in their preparation, and in distilling a sample for the purpose of applying the test to the distillate, the latter becomes contaminated by the volatile oil being dissolved in the vapor of alcohol, to which, if caustic potash be added, in many cases the mixture assumes a brown tint, owing to the well known action of caustic potash on many of the essential oils. Mr. Reynolds's method is as follows:—A small quantity of the suspected liquid is distilled, and to the distillate a little diluted solution of chloride of mercury added, and, finally, excess of caustic potash. The whole is then warmed, and if complete solution of the oxide of mercury has taken place, divide into two portions; to one acetic acid is cautiously added, which causes the formation of a yellowish bulky precipitate. After a short time the remaining portion is boiled strongly, and a similar precipitate is thrown down, thus proving with certainty that the wood spirit is present. In applying the test, if too much chloride of mercury be added, an insoluble compound will be found, and a negative result arrived at. Mr. Reynolds is persuaded by his numerous analyses that the adulteration of the officinal tinctures with methylated spirit is carried to a considerable extent in Dublin.

PECTORAL MIXTURE.

The following, from the *Canada Lancet*, is the composition of the "Acute Pectoral Mixture" so largely employed in the Montreal General Hospital:—Half an ounce nitrate of potash; four ounces vinegar of squills; four ounces paregoric; twelve grains tartarized antimony; and three pints and a half of water. Dose, a tablespoonful, when the cough is troublesome. An excellent and cheap remedy. The "Chronic Pectoral Mixture" is made the same way, leaving out the tartarized antimony.

Professorial Changes in Berkshire and Bowdoin.—Prof. P. C. Chadbourne, of Williams College, has accepted an appointment to the Chair of Chemistry and Natural History in Berkshire Medical College. He holds a similar position in Bowdoin College, Me.—Dr. C. L. Ford, Prof. of Anatomy in the Berkshire School, and of Anatomy and Physiology in the University of Michigan, has accepted an appointment to the Chair of Anatomy and Physiology in the Medical Department of Bowdoin Medical School, rendered vacant by the resignation of Prof. Conant. Both of these gentlemen carry to their new fields of labor the well earned reputation of ripe scholars, thorough, brilliant teachers, and Christian gentlemen.—*Bost. Jour.*

American Medical Times.

SATURDAY, AUGUST 22, 1863.

WAR AND HYGIENE.

Three hundred thousand lives during the past two years of the war have been sacrificed in battles and by disease—and the sacrifice is not yet ended. Bloody and terrible as this baptism of principles and of States at war has been, and may continue to be, the parties to the contest appear to have carefully weighed the consequences and considered the sacrifices of the conflict, and with consequences all anticipated, they boldly fling into the field nearly two millions of armed contestants as constant forces that shall not be diminished until the struggle is decided. Such a war and such sacrifices give definite and increasing value to the individual life of the soldier.

"To put a soldier into the field," says **Surgeon-General Hammond**, "costs the government nearly four hundred dollars; should he die, or become disabled in service, a pension is given. Looking at the matter, therefore, merely in a financial point of view, we perceive that it is a subject of serious importance, that every means should be taken to preserve the lives and health of those who come forward to fight the battles of their country."* Taken in a strictly economic point of view, the cash value of every soldier's life in the loyal army exceeds one thousand dollars, if that life can be preserved at full vigor during the war, or until lost in battle. Such is the simple arithmetic of war. The soldier's health and life become mathematical quantities, are made the basis of grand estimates in levying for recruits and conscripts, and in massing of forces in the field. Sound lungs, strong muscles, nerves well strung, senses perfect, and all functions in healthy action in the soldier, become and are essential elements in the military successes and prowess that crown the national arms. Thus **Mars** pays homage to **Hygiene**.

Life-saving, or its equivalent, health-saving, has become a most important branch in the art of war, and it has its full share in all grand strategic successes. A sickly army is a demoralized army, and must soon become a conquered force. And do we not see in the patriotic gratitude and munificent support that is given to the Sanitary Commission of our War Department, evidence of the enlightened confidence of the popular mind in reference to this principle? Fearfully is the truth on this subject brought home to the people as their choicest regiments return, after only two years' service, reduced ten *per cent.* by casualties of battles, thirty *per cent.* by deaths from disease, and twenty *per cent.* by invaliding or discharges on account of disability. Yet these are about the average ratios of losses; and few are the regiments that after two years' service in this bloody war can muster thirty-five *per cent.* of the men who first entered the field. It is stated that the aggregate of discharges from the service—mostly from hospitals—on account of disability, already amounts to 140,000 of the national forces. All this is a matter of momentous concern to the nation, and to the homes that furnished the volunteer soldiers. Thus is brought home the idea of the value and economy of health and lives—the fundamental idea, and the very animus of all true plans for promoting the science and works of Hygiene.

This subject is too vast to allow of full discussion in our columns, but there are two or three practical considerations to which we desire to invite attention.

The Royal Sanitary Commission, in the year 1857, reported to the Crown that "to the State the loss of men by invaliding is the same as loss by death. In either case the expense of obtaining and training a substitute must be incurred. * * * It is obvious, therefore, that the rates of mortality taken alone, represent a *part* only of the loss annually caused in the ranks of the army by disease." Thus with statesmanlike views did that Commission, under the leadership of **Sir Sidney Herbert**, its Chairman, and also the Secretary of War, set about studying the questions of military and public economy that are concerned in the health of soldiers. In a subsequent report upon army statistics the Royal Secretary concludes by asserting that, "if soldiers die in battle by hundreds, they die in hospitals by thousands. * * * We have shown that the excessive sickness of the army involves a large annual expense; it is evident that the diminution of that sickness will effect a great saving in peace, and an enormous saving in war. For sick men are not only a loss, but an incumbrance to an army. * * * The existence of an army in the highest state of efficiency would give additional security to the country without increasing the cost. * * * * War would be waged with some chances of success, and would sooner be brought to a close by such an army than by an army suffering from the diseases that have hitherto infested our barracks and camps." This is the just and reasonable ground upon which, at the present hour, the **Surgeon-General** of our army has planted his standard, both as an instructor and chief executor in works and measures for promoting the hygienic welfare of the national forces. In seconding and officially sustaining the vast undertakings of the Sanitary Commission, he has but done justly; for that Commission commenced its work at the opening of the war with **Sir Sidney Herbert's** views and spirit, and without mandatory power it has laid the basis of the broadest system of scientific and practical inquiries and works that has ever been put into operation. To the patriot, longing for the re-establishment of the national power and the restoration of rightful peace, such labors and their results afford a positive source of reliance, while science and the interests of humanity are to reap richest fruits. It is honorable to the spirit and purposes of our profession, that chief officers of the army medical service cordially recognise and appreciate such sanitary works and labors. We believe the fact will yet be acknowledged, that the men who have thus earnestly studied and successfully labored to promote the national cause, and to save life in this war, have merited the eternal gratitude of their country. And that Statesman or Cabinet Minister who will, like the late **Mr. Herbert**, boldly become the expounder of the claims and wants of the army medical bureau, will find his championship worthy of the best efforts of the patriot and statesman.

Another point worthy of attention in the progress of the war, is the wide extent to which the knowledge and principles of Hygiene have become popularized, and the lively interest of all intelligent men, in civil as well as military life, in the facts and purposes of sanitary science and hygienic improvements. We need not allude to the special causes that produced this result, for they are sufficiently obvious. But it is a result full of promise and significance, which must be followed up by comprehensive plans and earnest efforts of not only the few well known and skilled hygienists, but by the organized masses of the medical profession. The people have begun to appreciate the priceless value of human life ; and the vocabulary of sanitary knowledge, and the elementary facts of hygiene, are becoming familiar in every household. Our medical schools have each a professor for instruction in military hygiene, and every practitioner of medicine finds himself invited to be a private teacher of sanitary science in the homes of the people.

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* Treatise on Hygiene, with special reference to the Military Service, by **Wm. A. Hammond** Surgeon-General, U. S., pp. 13, 14.

THE WEEK.

The great increase of mortality in this city during the last few weeks is justly exciting public alarm. The number of deaths was at one period nearly double that usually reported. As usual at this season of the year sunstroke is frequent among laborers, and has this year been unusually fatal. But the real increase in the mortality list is due as usual to the large percentage of deaths among children. Cholera infantum, convulsions, and allied infantile diseases, have remorselessly swept off the generation under five years of age. It is evident New York is annually becoming less and less habitable by children during the summer months. The long accumulating heaps of garbage at this period undergo rapid putrefaction, and saturate the air with their poisonous emanations. Atmospherical changes usually combine to depress the system, and hence the hygienic conditions surrounding the *city* poor, in August especially, are such as to increase the mortality to a fearful extent. The new City Inspector has made a most commendable effort to clean the streets, but it is questionable if more harm than good is not done by stirring up those compost heaps during the hot weather. We can never hope to see a proper state of the public health of New York, until the streets, areas, lanes, etc., are daily cleaned.

We would call attention to the series of resolutions from the Kings County Medical Society, which are to be found in another column. The ground taken by this body is a very just one, and claims the serious attention of the entire profession. There is an absolute need for reform in the system of dispensing drugs, as practised by the majority of druggists in this and other cities, and we are glad to see that a step has been taken in the right direction. The practice of prescribing from behind a drug counter is very prevalent among a certain class of unprincipled individuals, and no one can for a moment doubt the propriety of striving to prevent it. Not only is it an injury to the community by trifling with their dearest interests, but the profession is directly outraged by the false foundation it is placed upon by incompetent pretenders. The community are too apt to look upon apothecaries to be as thoroughly qualified to give advice as to dispense medicines, and we regret to be compelled to say that there are too many who are willing to take advantage of this credulity. This practice, too, throws reflection upon the respectable class of apothecaries which we have among us, and it is due to them as well as to the medical profession, to use every legitimate means to discourage and discountenance it.

This, however, is only one of the features in the resolutions; there are others of equal importance to which we refer our readers. We hope the example set by this Society will be followed by others, and some measures finally be agreed upon whereby the evils may be remedied.

We conclude in this issue the remarks of Dr. Buck on the subject of strangulated hernia, as made at a late meeting of the New York Academy of Medicine. They are exceedingly well digested, and, coming as they do from one of our most prominent surgeons, we hope they will claim the attentive perusal of all interested in operative surgery.

Correspondence.

STIMULANTS IN THE ARMY.

[To the Editor of the American Medical Times.]

Vicksburg, August 1, 1863.

Sir :—In your number of July 11th, I was gratified to read a discussion on the subject of the use of alcoholic stimulants in the treatment of pulmonary diseases. Also an editorial by yourself, headed "An Indolent Profession."

The subject first mentioned, as you justly remark in another place, is of great importance in its relation to the habits of the people. Unfortunately the discussion of this and similar questions is sure to be influenced by the habits and preconceived notions of the disputants. Dr. Davis, of Chicago, whose advocacy of total abstinence is well known to the public and to the profession, shows by statistics that tuberculosis is very common among those who have used alcoholic drinks as a beverage or a medicine; while not one of Dr. Flint's cases, sixty in number, acquired a craving for stimulants. Dr. Parker cautious us strongly against the practice of whiskey-drinking, and Drs. Blakeman and Post give cases in which the habit of intemperance was formed from the prescription of the physician. These habits were followed by an ignominious death and a dishonored grave. I suppose that any physician in general practice, who did not use these stimulants himself as a beverage, would give the same testimony. I am sorry to hear you say that habits of intemperance are increasing rapidly amongst the people. During the last two years I have lived pretty much amongst the camps, and know but little of the condition of society. My life in the army has, however, given me an opportunity of making observations on the use, medical and general, of these stimulants among soldiers.

The appetite for stimulants in this department is certainly very strong, and is due, perhaps, first, to the effects of the intense and prolonged heat, producing great prostration; second, to want of variety in food; and, third, to the active agency of the malaria so common in this district. The intense heat calls for stimulants ; the uniform rations, generally very salt, call for drinks, as does the free and general perspiration induced by the heat. The continued cause of poison by malaria, producing diarrhœas, gastralgias, mental, moral, and physical depression, seems to call imperatively for alcoholic stimulants. And what are we to do ? The remedy is often at hand, and the relief, though temporary, is immediate. With the idea of a malarial influence entering the system through the digestive organs, I early adopted the plan of using freely vegetable acids, particularly citric, as a beverage. I found that the water which I drank was corrected by it, the gastralgia and sense of prostration relieved, while the frequent recurring diarrhœas were often prevented or cured. In charge of a large hospital at Grand Gulf, I recommended this practice to my medical staff, and they adopted it both individually and in their practice. Without it the water we drank would often produce diarrhœa in less than an hour. Surgeon Robarts, of the hospital-boat belonging to the marine fleet, has adopted the practice, and has his officers and patients freely supplied with lemonade made of citric acid, sugar, and water. Several surgeons in the field have informed me that they do the same thing in their regimental hospitals, and all with good effect. It is very common amongst the officers of the army, especially in the Southern Department, to carry with them a supply of what they call "good old Bourbon," which they imbibe statedly, in quantities proportioned to the sensibilities of the stomach, as a prophylactic. They often, in addition to this, carry with them a quantity of morphia or pulverized opium, which is to be used as a *dernier ressort.* Now, I have found that whenever an officer with these habits contracts diarrhœa or fever, it is ten times more difficult to stop it and cure him than it is to cure the same disease in one that does not use that prophylactic. The truth is, the evil in these prophylactics, to wit, the subsequent prostration of the stomach and other digestive organs, quite overbalances the temporary good obtained. To secure good health, and prevent the accession of disease, good and continuous digestion is necessary. This is sure to be interrupted by the aforesaid prophylactics. In my opinion, the only way to prevent such prostration following the use of these stimulants, is, to take them in small quantities, and always accompanied with some article of nutrition, such as milk, soup, bread or crackers, and cheese, or something of the kind. In that case the stimulant acts as a digestive, and the prostration which would have followed its use is prevented by the absorption of the nutritious matter. But I have strong doubt of the propriety of using alcoholic stimulants in any case as prophylactics. The remedy, in its effects, too often becomes worse than the disease.

Alcoholic Stimulants as Medicines.—I claim the right to use any article I can find in the animal, vegetable, or mineral kingdom, as a medicinal agent; but I would use these remedies with great caution, and always with the same restrictions that I administer narcotics and cerebral stimulants generally. I have accomplished great good by the judicious use of alcoholic stimulants in the hospital practice of the army. Convalescence from typhoid fever is often best treated by the use of these stimulants, and debility from various other causes may be removed according to the principles above suggested. The fact should always be kept clearly in mind that a stimulant is not tonic, but exhausting, unless followed by an improvement in the digestive organs. The physician at the same time is bound to respect the organization of his patient, and not (if possible) in curing him of one disease, lay the foundation of another and worse one.

Finally, I am surprised to hear you speak of an "indolent profession," and complain that medical men do not contribute to the literature of their profession. I supposed that your columns were continually supplied with original articles, both from the army and from private practice. I seldom see a medical journal, and cannot judge for myself. I know there are large numbers of well educated literary men in the army who, no doubt, daily record what they see and practise in camp and hospital. These things will be published "when this cruel war is over." The Surgeon-General has taken measures, which will, no doubt, be effective, to secure an official record of the Medical Department of the Army in good form and due time. Gentlemen are, probably, occupied with these compositions, and contribute less to the journals than they otherwise would. In my opinion, a good record of military surgery is all that has been wanted to bring the medical literature of this country up to the European standard. This is now being done, and henceforth our medical, like our monetary resources, will not depend upon foreign speculators.

Yours, etc.,
James Bryan, *Surg. U.S.V.,*
Department of the Tennessee.

THE PATHOLOGICAL ANATOMY AND TREATMENT OF SUN-STROKE.

[To the Editor of the American Medical Times.]

Sir:—The occurrence of so many cases of "sun-stroke" among us renders it important that the profession, as a whole, should *agree* as to the best mode of treating it. Occurring, as it does, suddenly, it behoves everyone to be prepared to meet it by prompt medication. In order to do this intelligently we should first make up our minds as to the actual lesions which exist—in other words, What is the pathological anatomy of the disease? As one intensely interested in the subject I have consulted numerous authorities for a satisfactory explanation of the problem, and am free to confess that I am as much in the dark as ever. Have not some of our savans, our pathologists, studied up this subject sufficiently to give an answer to my query? The treatment for this accident is very variable, and generally consists in modifying the effects of the shock by administering stimulants, and applying cold to the head. I know some have bled patients with sun-stroke, and have also given emetics, but I am only too glad that I have not to be burdened with their consciences. I have learned that ice applied freely to all parts of the body has been attended with a good result, and, in want of a better remedy, I think I should try it in the first case that may unfortunately fall into my hands. The question of the treatment, and of the pathological anatomy, should be settled, I think, at once, and for that reason I would solicit information from some of your many talented contributors.

Yours, etc.,
G.

SARRACENIA PURPUREA IN SMALL-POX.

[To the Editor of the American Medical Times.]

Sir:—Having noticed an article in your periodical relative to the use of the pitcher plant as an abortive remedy, as well as a prophylactic and palliative in the treatment of variola, I will, with your approval, give some of my slight experience in the use of the drug.

Whilst I was physician to the Small-Pox Hospital, Blackwell's Island, *i.e.* during the three winter months of 1862–3, I was visited by a person from Nova Scotia who pretended to be the one who first introduced the remedy to the public, he having obtained a knowledge of it from a tribe of Indians with whom he was in great favor. He said it had proved itself worthy of the utmost confidence amongst his people, and gave several cases which I thought were, or might as well have been, treated by the expectant plan.

I also have a letter from F. W. Morris, M.D., of the same place, physician to a dispensary in Halifax, who says in regard to it, "If given at any time whilst there is yet any power for reaction, I believe it will never fail to cure. * * * In the language of the Micmac Indians, it kills the disease. It is of so mild a nature that the smallest infants may take it with perfect safety."

I think, judging by the cases I have heard related, that the remedy has been given, if administered successfully, either in cases of varioloid or in those of discute small-pox before the third day, and the subsidence of the febrile movement that always occurs about that time has been ascribed to the medicine.

The following is a copy of notes taken at the bedside of one of my patients, though they are not exactly such as I could wish:—

Agnes Jones, aged 19, a native of New York, was admitted into this hospital Jan. 14, 1863. She is of the sanguine temperament, and apparently has a strong and vigorous constitution. Her habits have been good, and there has been no illness of any kind affecting her up to the present time. She is unmarried, and has lived in the country for the last few months, serving as a domestic, but returned three weeks ago to this city, and has since resided near Sixth Avenue, in Sixteenth Street. She was vaccinated five or six years ago, but the operation was unsuccessful. She does not remember any previous insertion of the vaccine virus, nor any recent exposure to the variolous poison. On the morning of the 9th inst. she had malaise and a bad taste in the mouth, and soon afterwards a chill, followed by nausea and emesis, the last of which continued to trouble her at intervals throughout that day and night. She had also a severe supra-orbital headache and pain in the side and lumbar region, and was affected with thirst, constipation, a moist, hot skin, and anorexia. On the evening of the 11th some small red papulæ made their appearance upon the arms, and a physician was called, who pronounced it hives, and prescribed some Seidlitz powders. These, however, did not check the eruption, and it continued to spread until it had covered the whole body. She now has a moderately full and forcible pulse of 94; the skin is moist and warm; eyes injected and watery; a yellowish moist coat upon the tongue; some thirst; urine high-colored, and passed at the rate of twenty-eight ounces in twenty-four hours. The menses commenced to flow on the 10th, and continue yet. She has been affected with complete insomnia and restlessness for the last two nights. The eruption is vesicular and confluent, and upon the arms in several places forms blebs. In the pharynx it is abundant, giving dysphagia, cough, etc. In the lungs there is a subcrepitant râle. Prescribed infus. sarraceniæ purpureæ radicis (ʒi. to Oj.), ℥ iv. every fourth hour, and an infusion of the dregs as a lotion for the face, and as a gargle. Her diet consists mainly of beef-tea, eggs, and milk. Jan. 15, eight A.M.—Pulse 90, and of normal fulness and force; tongue unchanged; there is some thirst and considerable nausea; diaphoresis is increased; urine more transparent, and she has passed thirty-seven ounces since eight A.M. yesterday; constipation, heat of skin, and insomnia, continue. Nine P.M.—Pulse 100, and smaller; the vesiculæ are mostly changed into the pustular form, and are umbilicated. There is tumefaction of the face, and pain in the back and limbs. Jan. 16, eight A.M.—Pulse 100 and full. There are insomnia, constipation, thirst, severe pain in the lumbar region, a white tongue, anorexia, and a moist hot skin. There have been 36 oz. of urine passed. Nine P.M, she has had an alvine evacuation; pulse is 104; menses flow yet. Jan. 17, eight A.M.—Pulse 112; she has some thirst and pain in the chest, and the mouth is lined with pustules. She has passed 40 oz. of urine. Jan. 18.—Pulse is 124, and moderately full. The tongue has a brown, dry coat, but there is no pain, and she obtained some sleep last night; constipation and slight thirst exist; she has passed 28 oz. of urine. Nine P.M., pulse is 130. Jan. 19.—Pulse is 134, and rather small and weak; tongue unchanged since yesterday; constipation, thirst, and anorexia, continue. Prescribed whiskey ℥j., beaten with eggs and milk, and tr. aconite, gtts. iij., every four hours. Nine P.M., gave her tr. hyosciami to produce sleep and quiet irritation, also ol. ricini ℥j. Jan. 20.—Slept well last night, and now has no thirst; pulse is 130, and moderately full. The tongue has a thick, white, moist coat; there is severe angina, so that liquids return by the nose on deglutition. She had an alvine evacuation this morning; ordered chlorate potassa gargle, and fomentations to the neck, and whiskey ℥j. and tr. hyosciami ʒj. every four hours. Nine P.M., pulse 132; no pain. Jan. 21.—Pulse 138, and small; tongue brown and dry; subsultus tendinum; thirst and mild delirium; areola not very dark; no diminution of tumefaction. Seven P.M., she has been troubled with rigors; the tongue is dry, and urine turbid and high-colored. Pupils normal, and there is no photophobia, but some cephalalgia; gave her whiskey ℥jss., and tr. hyosciami in the same dose and frequency as heretofore. Jan. 22.—She has pneumonia. Pulse 126, and small; tongue dry; talks rationally, and says she has no pain. Ordered spts. eth. nitrici et tr. hyosciami, āā, ʒj., and whiskey ℥ij., every four hours, each dose containing grs. ij. quinine; also fomentations to the thorax. Jan. 23.—Pulse 112, and fuller; tongue more moist; areola bright; delirium continues. Medicines continued. Nine P.M., pulse 122, and small, and the tongue is dry. She had a dejection this evening. Jan. 24.—Pulse 132, and small; no pain expressed. Nine P.M., pulse 132. Has evacuated the bowels and bladder. Prescription as before. Jan. 25.—Pulse 138, and small; tongue dry; muttering delirium; urine scanty. Nine P.M., pulse 150, and she is moribund.

The sarracenia purpurea was used in three other cases (one of rubeola); but without wearying you with the minutiæ, I will simply say the results obtained from it were like those in the case already described, viz. diuresis and diaphoresis, and the patients recovered, just as they would have done if the remedy had not been administered, there having been no abridgment of the malady.

Yours, etc.,
H. G. Olmsted, M.D.

Bellevue Hospital, New York, Aug. 12, 1863.

APOTHECARIES AND THEIR RELATIONS TO THE MEDICAL PROFESSION.

At a meeting of the Kings Co. Medical Society, held July 14, 1863, the attention of the Society was called to the censurable course pursued by some of the druggists of the county. It was stated by several of the members that these gentlemen were in the habit of commenting upon prescriptions to the disparagement of physicians, substituting other articles for those prescribed, and not unfrequently renewing the prescriptions without the knowledge or consent of the attending physician, and that they were in the habit of prescribing for patients. For these, among other reasons, a committee was appointed, who made the following report, which was adopted:—

Whereas, It is eminently desirable that the art of prescribing and dispensing medicines should conform, as far as possible, to scientific accuracy; therefore,

Resolved, That the Medical Society of the County of Kings recognises the fact that physicians should be scrupulously careful in writing their prescriptions distinctly, and that they should use, as far as practicable, officinal names only.

Resolved, That it is the duty of dispensing apothecaries to put up prescriptions distinctly as directed, or to reject them, excepting, however, when there is cause to suspect a mistake; in which case, it is manifestly the duty of the apothecary to assure himself of the intention of the prescriber, before dispensing the prescription.

Resolved, That the practice which some apothecaries indulge in of treating cases of disease constitutes quackery in its worst form, because of the false confidence which their semi-professional character inspires in the minds of the people.

Resolved, That recommending nostrums, prescribing, criticizing prescriptions, or otherwise indulging in conversation tending to impair confidence in the author of a prescription, substituting other articles than those directed by physicians, keeping incompetent clerks, dispensing medicines of bad quality, repeating prescriptions against the expressed wish of the prescriber, and habitual carelessness, are all disreputable practices; and it shall be the duty of the members of this Society, who may hereafter become cognisant of such conduct, to report the same to the Society for the benefit of his Fellows.

Resolved, That these resolutions and preamble be approved by the President and Secretary in behalf of the Society, and published; and that a copy of the same be presented to every apothecary in the county, if practicable.

Dewitt C. Enos, *Prest. Kings Co. Med. Soc.*
John T. Young, M.D., *Sec. Kings Co. Med. Soc.*

Army Medical Intelligence.

SPECIAL ORDERS, No. 158.

In pursuance of instructions received from headquarters of the Department Surgeon E. M. Porren, 7th Mo. Inf., is relieved from further duty in the Jackson U.S. Military General Hospital.

Assistant-Surgeon W. Watson, U.S.V., is assigned to duty as Surgeon-in-charge of the Jackson General U.S. Military Hospital.

SPECIAL ORDERS, No. 161.

Surgeon G. F. Weeks, U.S.V., having reported to this office, is assigned to duty as Surgeon-in-charge of the Church U.S. Military General Hospital.

Surgeon S. L. Cheaney, 29th Illinois Inf., is relieved from the charge of Officers' General Hospital, and will report to the commanding officer of his regiment at Vicksburg, Miss. (in obedience to orders from Dept, Headquarters.)

Original Lectures.

DISEASES OF THE RESPIRATORY ORGANS IN CHILDREN.

BEING A COURSE OF LECTURES PREPARED FOR DELIVERY DURING THE SPRING SESSION OF 1862 IN THE COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.

BY THE LATE
C. VAN ALEN ANDERSON, M.D.,
PHYSICIAN TO CHILDREN'S DEPARTMENT, DEMILT DISPENSARY, N. Y.

LECTURE VI.—PART II.

BRONCHITIS.—PNEUMONIA.

THE symptoms of inflammation of the lungs vary somewhat according to the portions which are attacked by this disease: we may, therefore, study separately simple acute bronchitis, in which only the primary and secondary bronchi are affected; capillary bronchitis, in which the finer tubes and air-vesicles suffer; and, thirdly, pneumonia, or inflammation of the substance of the lungs, which most frequently follows bronchitis, is sometimes idiopathic, and at others secondary to various disorders, such as croup or hooping-cough.

The symptoms of simple bronchitis are few, and easily recognised. There may be some chilliness if the child be old enough, for you will remember that children at the breast seldom or never have chills. At any rate, there is a slight febrile attack which may readily escape the attention of the parents or nurse; but a short, dry cough, which speedily comes on, is not so easily overlooked. This cough is occasionally paroxysmal, but it is never hoarse; it does not continue dry, but after awhile becomes thick and moist; it is not accompanied by any expectoration. The respiration is always quickened more or less, the amount of acceleration varying with the gravity of the disease. The pulse is more frequent than in the state of health, and shows a disposition to increase at night. The countenance is not distressed, but has a languid expression and some degree of pallor. I have, however, seen many children in which its character was unchanged.

The physical signs of this disease are extremely simple. On percussion, both sides of the thorax are equally and normally resonant. On auscultation, the ear distinguishes the loud, snoring, sonorous râle, the sibilant râle, which is hissing or whistling in its character, and a large, coarse crepitation. These sounds are more or less fugitive—appearing here and there—mixed with each other, and, especially the sonorous râle, vanishing from any given spot after a cough; but the sonorous and sibilant râles are more likely to be heard at the upper, and the coarse crepitus at the lower part of the lungs.

While this inflammation of the larger branches of the bronchi is not very alarming in itself, yet it may become the source of extreme danger, or even of death. This can happen in three ways:—The copious secretion of a viscid mucus may easily cause the occlusion and collapse of large portions of the lung, an accident which we have learned to consider very serious; or the inflammation, spreading by contiguity, may invade the finer bronchial tubes and air-vesicles, in which case the disorder is known as capillary bronchitis; or extending still further to the substance of the lung, it may become pneumonia. A case of ordinary bronchitis, therefore, although it may be simple enough, and seem to require very little treatment, still deserves close and careful *watching*.

In a very few cases inflammation seizes suddenly upon the finer divisions of the bronchi and upon the air-cells; but, as a general rule, the morbid action has commenced in the larger tubes, and extends from them. In this event we have a very formidable disease to contend with. The attack begins with the usual symptoms of catarrh, the slight fever, and dry cough, which we have already observed; the general health does not appear much deranged: the infant preserves its ordinary behavior in its nurse's arms, and older children continue their games and amusements.

In the course of a few days, or sometimes even of a few hours, symptoms of great significance make their appearance. Either there is a rapid progress in the bronchitic phenomena, or else a sudden outbreak of serious disease. The fever is heightened and increased, the respiration is greatly quickened, shallow, often panting like that of an animal, and remarkably abdominal in character. The alæ nasi are greatly and rapidly distended and contracted, by the observation of which motions we are enabled to ascertain the frequency of the breathing, for each dilatation corresponds with a respiratory effort. The manner of the child conveys the idea that all his strength is concentrated in his efforts to expand the thorax; lying on his back or on his side, with a heavy, anxious countenance and distressed eyes, his head thrown back, or else having a slightly nodding motion with each breath he draws, he shows an indisposition to be disturbed, is impatient, and is irritable and hurried in his answers to questions. His muscular system seems enfeebled: it is difficult to make him sit up, and when he does so his head falls wearily to the right or left. There is no appetite, but much thirst, which, however, the little patient cannot satisfy, for the time required to swallow fluids is wanted for breathing, so that he continually calls for water, with which he does little more than moisten his lips. The mouth, though somewhat hot, is yet not dry, and the tongue either preserves the condition that it had in health, or presents a thin, white or yellowish coating; the bowels are disposed to constipation; there is in some cases nausea and vomiting; in others it is difficult to produce emesis; and in others again, although the exhibition of emetics seems not to be responded to, their action after a while is readily induced. This kind of bronchitis is that which I told you bore some resemblance in the paroxysmal nature of its cough to pertussis; for, as the disease advances, the cough loses the hacking character that it had at first, and sometimes returns in fits like those of hooping-cough, except that they are shorter, are not followed by a hoop, and are not attended by expectoration. As the disease progresses the respiration grows more hurried, and is attended by more intense dyspnœa; the palms of the hands and the soles of the feet become burning, the pulse rises to 140, 160, 180, and the respiration to 60, 70, 80. The face is pale, or streaked here and there with livid lines, or else of that dusky hue which is associated with asphyxia; the cough becomes smothered, the feebleness is more marked, and the child begins to be somnolent. As death approaches the pulse attains such a rapidity, combined with such weakness, that it is impossible to count it; the drowsiness becomes more profound; strabismus, spasmodic twitchings of the muscles of the trunk and extremities, and accessions of terrible exhaustion, are observed, until, finally, the poor little patient dies.

If, on the other hand, the complaint is to terminate in resolution, the unfavorable signs gradually die away, the pulse becomes fuller and slower, the dyspnœa less, the respiration more harmonious, the eye brighter, the color of the face more natural, and the disposition to somnolence vanishes. The muscular strength, also, is regained, and the child will emerge from this disease to a state of robust health with a celerity that is truly astonishing.

When we consider that capillary bronchitis consists in inflammation of the smallest twigs of the bronchial tree, it will be evident what physical signs we are to look for. The chest is resonant on percussion, because, even with a considerable degree of dyspnœa, there is air enough in the cells, though that air does not escape from them so readily, and is not so frequently changed as in health. The lung still preserves its spongy texture, and, therefore, when we strike the thoracic walls, we obtain the normal clear sound.

On auscultation we will remark, in the first place, that abnormal bruits are heard in both lungs. In the beginning of the disorder a scanty transmission of air is detected, accompanied by the sounds developed in the larger bronchi, sonorous râle, and coarse crepitus, which may entirely mark the evidences of the inflammation having extended to the smaller tubes. But before long a subcrepitant râle is heard all over the lungs—a râle which, you know, is larger than the fine crepitation of pneumonia, and smaller than the ordinary coarse crepitation. This râle indicates the involvement of the smaller ramifications of the bronchi; it exists both in inspiration and expiration, and remains unchanged until the approach of death, when the air, penetrating only to the larger tubes, produces a coarse, mucous rattle, which is truly a sound of ill omen.

The diagnosis of both simple and capillary bronchitis is, then, extremely easy. They are both associated with fever, with cough, with more or less uneasiness in the chest. In listening to the coarse crepitus and sonorous râle of the one, or with the subcrepitant râle of the other, and associating these signs with resonance on percussion, we find no difficulty in assuring ourselves of the true nature of the case.

Simple bronchitis passes through its stages in a uniform manner, lasts a few days, and then terminates either in resolution or in the form of the disease which we have just studied. Capillary bronchitis lasts from two days to a week, but terminates less frequently in resolution than in pneumonia, collapse of the lungs, and in some cases in phthisis. It is extremely fatal.

Before mentioning the symptoms of pneumonia in children, I desire to call your attention to the treatment of bronchitis. In the simple form of the disease there is very little to be done, that is, in the way of medication; but there is a great deal required in the way of care and watchfulness. Confinement to the house, so as to secure a tolerably equable temperature, warm baths to assist the proper function of the skin, light, but nutritious diet, an occasional emetic which shall prevent too great an accumulation of mucus in the bronchial tubes, and some form of counter-irritation over the chest, are all the means that you will use, unless, indeed, you resort to a very mild expectorant in order to quiet the apprehensions of the parent. But at the same time the trustworthy physician, knowing the danger there is either of collapse of the lung, or of the supervention of capillary bronchitis, or of pneumonia, will watch the case closely, and will keep himself properly informed of the state of affairs within the thorax by the frequent performance of auscultation, and by a proper observance of the pulse, heat of skin, and respiration of his patient.

In the severe and dangerous inflammation of the smaller tubes energetic and decided treatment is necessary. We must remember that it is liable to pass into pneumonia with great ease, or else to depress the patient with alarming rapidity. We are, therefore, not justified in bleeding, or in the use of depressing remedies, for the strength of the system is to be preserved as far as possible; yet we may occasionally meet a case in which, in the early period of the complaint, the application of a leech or two to the arm or hand may prove beneficial; but remember that this measure is likely to increase the sensibility of young children, and may throw them into a very serious nervous state.

As our object is not to favor the accumulation of the secretions in the bronchial tubes, we will avoid the use of expectorants, which I am convinced do more harm than good; but as we wish to get rid of these mucositics, and to diminish febrile action as far as we can, we will find in emetics a class of remedies capable of accomplishing both of these ends. The fluid extract of ipecacuanha, each drop of which is equal to one grain of the drug, possesses the advantages of being very active, and of being easily administered; but we must be careful that the continued use of it does not produce a weakening diarrhœa. Vomiting should be brought on twice a day or oftener if there are evidences of copious secretion in the air-tubes.

The walls of the chest supply us with the situation for the application of revulsives. Dry cups all over the thorax, if the child be not too much alarmed by them, friction with olive-oil and oil of turpentine in equal quantities, or cloths wrung out in hot water, sprinkled over with turpentine, and then closely applied to the skin, will have a powerful effect. Blisters are objectionable for three reasons:—1st. The prolonged irritation they cause acts unfavorably on the nervous system of a child; 2d. They are apt to be followed by troublesome sloughs or even gangrene; and, 3d. They interfere with the use of warm baths, which is a remedy of great value.

Towards the termination of the attack, and in many instances even in its early stages, recourse must be had to stimulants. "Wine," says Rilliet and Barthez, "is the one of which the action is the most prompt and the most efficacious; we have seen a case in which death appeared imminent, and in which the use of wine aided in surmounting a period which, in the immense variety of cases, is the last." A teaspoonful or a dessert-spoonful, according to age, of wine and water, or of strong wine-whey, may be given in pressing cases every half hour; in less urgent ones, every two or three hours.

During convalescence, when the acute symptoms have ceased, and the danger is over, if the patient remains pale and debilitated, he should take small doses of the sulphate of quinine, or of the citrate of quinine and iron; or as change of air will be of service, you can send him to the neighborhood of some chalybeate spring, where the influence of the tonic will be aided by the pure atmosphere of the country. Usually, however, the recovery from capillary bronchitis is exceedingly rapid and complete.

In considering the symptoms of pneumonia it is hardly necessary to go over the old controversy whether such a thing as real lobular pneumonia does exist, since we will find that primary pneumonia, which is rare in young subjects, affects the whole lobe, or more than one lobe, just as in the adult; while it appears reasonable to admit that the inflammation which follows bronchitis may extend from lobule to lobule.

The attack, if the disease be primary, may come on suddenly, but more frequently it follows bronchitis, and is so insidious in its onset that it is by no means easy to determine the exact period of the seizure. The child is restless, depressed, takes its food without much pleasure, cries at the slightest opposition to its wishes, and is either wakeful at night or else slumbers uneasily and talks in its sleep. After awhile some fever is observed, accompanied by disturbance of the respiration, and a short, hacking cough which does not seem to trouble the child much, and may sometimes entirely escape the notice of the parents. Increase of thirst is soon seen, with vomiting, perhaps, and constipation of the bowels, while the tongue is inclined to be dry, is red at the edges, and coated in the middle with a heavy, white fur. The results of auscultation in this early stage are not as satisfactory as they afterwards become; sometimes they afford no information at all, and at others the ear distinguishes only a coarse crepitus over both lungs. Percussion gives negative results.

These symptoms last from twenty-four to forty-eight hours: if they disappear at that time, the case has been one of simple bronchitis; if they increase, it develops into pneumonia.

The child then becomes more restless and agitated, the appetite is lost, and the thirst excessive; heat of skin comes on at irregular intervals; the eyes begin to assume the brilliancy of fever; the pulse increases in frequency, and a change occurs in the mode of respiration which is sufficiently remarkable. The breathing takes place not only through the nostrils, as in health, but also through the open mouth; at each inspiration the alæ nasi dilate with a considerable effort, and the eyebrows are knitted, while the lips are held apart, increasing the discomfort of the complaint by the dryness of the tongue and fauces thus produced. As the inflammation acquires a firmer hold, the little patient shows a disinclination to be disturbed, and a certain amount of drowsiness; the cough is frequent, hard, dry, sometimes painful, sometimes a continual hack, sometimes assuming a *kinky* character, and coming in fits. The respiration, also, is hurried, as is manifested by the movement of the nostrils, and the muscles of the abdomen which are brought into play in order to assist in its performance. The fever becomes more intense; the skin more hot, and with a peculiar kind of heat, "pungent heat," as it is called, in order to express the fact that it becomes more sensible the longer the hand is kept in contact with the surface. This pungency is most marked upon the trunk, for in many cases the extremities are cold, while the rest of the body is burning. The face wears a heavy, sodden, anxious expression, and if the pneumonia is very intensive, has a livid color around the mouth and under the eyes. Children at the breast are unable to suck; as often as they attempt to take the nipple the dyspnœa becomes so urgent that they are forced immediately to drop it, and lie panting and exhausted in the nurse's arms.

Original Communications.

SOME FURTHER EVIDENCE OF
THE EFFICIENCY OF SULPHURIC ETHER
AS AN ANÆSTHETIC.

By F. D. LENTE, M.D.,

SURGEON TO "WEST POINT FOUNDRY."

About a year ago, in one of the July numbers of this Journal, I furnished a list of surgical operations in a military hospital of which I was, for a time, surgeon-in-charge, in which sulphuric ether was administered by me, or under my direction, noting the *time* and *quantity* requisite for *complete* anæsthesia, with the object of inducing other surgeons to substitute this agent for *chloroform*, by proving conclusively, *as these cases do*, that the only objection which is *now* urged against *ether* (the *length of time* and the *large quantity* requisite) is entirely invalid, and due only to a faulty mode of administration. These cases were witnessed by many eminent surgeons from different parts of the country, who had been always in the habit of using chloroform, and by several army surgeons, who expressed great surprise and pleasure at the facility with which the patients were brought under the influence of the ether, and the simplicity of the means. One of them, at least, has since succeeded in procuring the substitution of ether for chloroform in a large public institution, of which he is one of the attending physicians.

Convinced myself years ago of the facility with which patients may be brought under the influence of sulphuric ether, and, *with ordinary care*, of its entire immunity from danger, I felt the importance of bringing forward occasionally fresh facts in illustration of this, and have accordingly done so at different times and in various journals. A number of private letters, received from some of the most distinguished members of the profession, expressive of their gratification at these efforts, and urging a continuance of the same, as well as a sense of duty, has induced me to solicit the attentive consideration of those surgeons especially who urge the above objections against sulphuric ether, to the following tabular statement of such operations as have occurred in my practice here since the publication of the cases above alluded to, in which I had occasion to use an anæsthetic, and in which there was opportunity for carefully noting the *time* and *quantity*.

No.	Nature of Operation.	Time.	Quantity of Ether.	Sex.
		Min.	Drachms.	
1	Extraction of Teeth	3	12	Fem.
2	"	4.30	14	"
3	Partial Amputation of Hand	4	16	Male.
4	Extraction of Teeth	2.30	12	Fem.
5	"	8	12	"
6	Partial Amputation of Hand	3	12	Male.
7	Exsection of Small Tumor	8	2	Fem.
8	Extraction of Teeth	2	3	"
9	"	8	8	"
10	Deep Incision for Palmar Abscess	Not noted.	7	Male.
11	Removal of Sequestrum of Humerus	2	7	"
12	Excessive Irritability of Bladder—Introduction of Catheter	8	6	Fem.
13	Excision of Cancerous Mamma	4	10	"
14	Instrumental Delivery	8	10	"
15	Reduction of Dislocation of Ankle-Joint	3.30	12	Male.
16	For Necrosis of Jaw	4	12	"
17	Diseased Bladder (Child)—Introduction of Catheter	1.30	1½	"
18	Amputation of Finger	2	16	"
19	Extraction of Teeth	6.30	16	Fem.
20	Amputation of Leg	4	12	Male.
21	Cheiloplastic Operation	3 30	12	"
22	Removal of Tumor from Neck	1.40	8	Fem.
23	Incision of Carbuncle	8	8	Male.
24	Incision of Deep Palmar Abscess (Child)	1.30	5	"
25	Amputation of Arm	2	8	"
26	Removal of Neuromatous Tumor	4.30	8	Fem.
27	Reduction of Old Dislocation of Elbow	4	9	Male.
28	Extraction of Teeth	4.30	8	Fem.
29	"	2.30	7	"
30	Reduction of Dislocation of Semilunar Cartilage	5	14	Male.
31	Amputation of Arm	2	8	"
32	Crushed Foot—Partial Amputation	2	6	"
33	Amputation of Thigh	2	4	"

Quite a number of the operations, it will be perceived, consists in the extraction of teeth. In many cases from six to fourteen teeth were extracted during the etherization, the patient being all the while perfectly insensible. These operations afford a better test, perhaps, of the efficiency of an anæsthetic, than almost any other, as the patient is in an unfavorable posture, and the muscles must be perfectly relaxed in order that the operation may proceed satisfactorily. It will be noticed, accordingly, that a larger amount of ether, and a longer time are required, in these operations, than in those of greater gravity, or those more strictly surgical.

I would also remark, that these operations have not been *selected* because in them the action of the anæsthetic was more satisfactory than in others, for such is not the fact, other equally painful operations having been equally successful as to the anæsthesia during the same period, but because there was opportunity to note carefully the time and quantity, operations in the country not always allowing this.

The 1st, 3d, 6th, 7th, and 31st operations were performed by my partner, Dr. P. C. Barker. Dr. Davis, the dentist of this place, was generally the only professional witness of the dental operations, which were mostly performed by him; some of them by Mr. Saunders, hospital steward of West Point. Drs. P. C. Barker and William Young, of this place, were present at most of the operations, and noted the time and quantity in many instances. Dr. Sheldon, U.S.A., was present at the 11th, and Dr. Pryor, house-surgeon of Bellevue Hospital, at the 20th and 21st.

As regards the *inhaler*, I formerly used a cup-shaped sponge, large enough to cover the face, enveloping this with several folded towels; but one made with *coarse* and *stiff* towels alone, which are generally obtainable anywhere, is decidedly preferable, and it was this which was used in the above cases. The towels are to be laid together, and folded so as to make a cone sufficiently large to cover the nose and mouth; a handkerchief or soft cloth is then to be thrust into the apex of the cone, on which the ether is to be poured. I will describe again the mode of giving it, so as to insure the saving of time and ether; by using it more lavishly the average time might be diminished still more. A drachm or two (for an adult) are first poured rapidly into the cone, which is then approached close to the face of the patient (who has been previously directed to breathe through the nose and mouth, shutting the eyes). If coughing be excited, a little air is allowed to enter with the vapor of the ether for a few moments; two or three drachms more are then thrown quickly into the cone, which is rapidly replaced, and now kept closely applied to the face at every point; frequently an additional towel is thrown over it, if the vapor seems to escape. When the patient struggles, after becoming excited, and endeavors to tear the cone from the face, it must the more resolutely be kept there, and no air allowed to enter around the edges. Sometimes the breath is held for some moments, in which case a little air may be allowed until he breathes freely again. The pulse should always be attended to, and if this be done, no fears regarding the ether need be entertained, as no *sudden* effect, like that often produced by chloroform, can be produced by it. A certain amount of practice and some tact are required to get the full effect of ether with an ounce or less, and within three minutes, unless the patient is very feeble or suffering from shock. One great cause of failure lies in withdrawing the inhaler too long from the face, from time to time, in order to replenish the ether, or for other causes, and not keeping it closely applied, thus cutting off all access of air except what enters through the pores of the towels; also in allowing a draught of air in the room; even in warm weather the apertures of the room should be closed during the first inhalation. I hope I may be excused for taking up space with these minutiæ, but without attention to them failure will often result.

COLD SPRING, N. Y., Aug. 18, 1863.

CASE OF

FRACTURE OF INFERIOR MAXILLA,

TREATED BY A WIRE GRIPE.

By A. J. HYDE, M.D.,

OF EAST HARDWICK, VT.

MR. F. FARRINGTON, merchant, æt. 25 years, received a kick from a horse, fracturing his lower jaw, between the bicuspids, on the right of the symphysis.

I saw him about two hours after the injury, in a half-conscious state, he having been severely stunned by the blow. The horse-shoe had cut through the soft parts underneath the chin, the blow being directed upwards and backwards. Mobility was complete, the fragments moving half an inch upon each other without difficulty. The crepitation was distinct. Blood and saliva were flowing freely from the wound and mouth. Both teeth adjoining the fracture were loose, but I decided to attempt to save them both. Reaction came on; the concussion of the brain passed off in a day or two by the use of cathartics, and the only point before me was to keep the fracture in place. I was three days in trying many different appliances recommended by authors in case of this fracture. They each entirely failed to keep the portions of bone together. I really could find nothing in books which, being followed out, would answer the requirements of the case, for each time the patient swallowed the fracture would spread apart. I then hit upon the plan of griping the teeth with wire. I simply wanted a pair of nippers, a dental file for separating the teeth, and a piece of fine wire. Of the latter I happened to find some the ladies use in making hair wreaths. The second tooth on either side of the fracture being firm, I filed down between that and the next, it being between the first and second molars on one side, and the bicuspid and incisor on the other, this being done without causing much pain. I then took five or six strands of the wire, untwisted, in a piece of sufficient length to pass round through these two places of separated teeth, thus embracing the fracture with it. It being tucked down as near the alveolar process as possible on each side, I brought the two ends of the wires together externally, took my nippers, and twisted them together until the fracture was brought perfectly in place. This was all the means I used, and I was gratified to see the portions of jaw remain firmly in place.

His food, of course, consisted wholly of liquids. The blood oozed slightly from the wound and mouth for five or six days, and then ceased. I only claim for this that it is simple, practicable, and efficient, where the fracture is between teeth.

I need hardly add that union in due time was perfect, and the gripe was removed. The two loose teeth were saved, and are firm and good now, nearly four years after the accident.

INJURY OF SPINE.

By A. J. PHELPS, SURG. U.S.V.,

MEDICAL DIRECTOR 4TH ARMY CORPS.

I NOTICED in the TIMES of January 10th, 1863, an article entitled "Operation for Compression of the Spinal Cord, with Remarks, by H. A. Potter, M.D.," in which the following passage occurs, namely:—"In all cases which have come under my notice, and I have seen eight, *when blood is taken from a vein of the arm, it is arterial.*" This appeared to me to be a very remarkable phenomenon, just the contrary of what I would have expected, and I took the first opportunity that occurred to test the fact, and which I will record as follows:—

Private John River, Co. D, 24th O.V.I., æt. about 25, of robust habit, while in bathing, July 12th, attempted to dive, but owing to the inequality of the bottom of the stream he struck upon his head, and the concussion, although causing but slight injury to the scalp, produced such a degree of paralysis that he would have drowned immediately had he not been rescued by a comrade.

Upon examination of his case, when brought to camp, it was evident that a serious injury had been done to the spinal cord in the cervical region. His respiration was entirely diaphragmatic, and there was total paralysis of sensation and motion, with the exception of the muscles of the neck and upper arm. His intellect was clear.

It was several days after he was injured that I saw him first. No displacement of the vertebræ could be distinguished, and but very little tenderness. I decided it to be a case of subluxation of the third and fourth cervical vertebræ, and consequent injury of the cord at that point. Considering the case as hopeless, and being one in point, I directed him to be bled from the arm to the amount of ten ounces. The stream flowed freely, *but the blood presented all the appearances of venous blood,* the same as in health. He died on the fourth day of August, and upon post-mortem examination the posterior ligaments between the third and fourth cervical vertebræ were found ruptured. Circumstances prevented a proper examination of the cord, and the case is only reported as bearing upon the blood phenomenon observed in this class of cases by Dr. Potter.

MANCHESTER, TENN., Aug., 1863.

M. BOULEY has pointed out an important circumstance to the Academy, which will doubtless occasion much discussion. A horse was brought to him affected with aphthous stomatitis. He thereupon inoculated the liquid aphthous matter on the teat of a cow, on the 10th of last June. On the 18th, of five punctures, four presented pustules, perfectly identical with cow-pox. M. Bouley then inoculated two infants with matter taken from these pustules. In one of the infants, three perfect pustules, identical with vaccine pustules, were developed. This child was presented to the Academy. Moreover, five pupils at Alfort, all previously vaccinated, were inoculated with this new matter, which produced in them a more or less well marked pustulation, similar to that produced by vaccination.—*Brit. Jour.*

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, Feb. 18, 1863.

DR. JAMES ANDERSON, PRESIDENT, IN THE CHAIR.

(Continued from page 76.)

DISCUSSION ON STRANGULATED HERNIA.

Dr. Detmold stated that, during the last twenty years, he had been in the habit of operating for strangulated hernia without opening into the sac. He would never open the sac unless he was compelled to, either by the existence of a strong annular constriction in the sac, by a very large hernia, by a very strong stricture, or in consequence of the presence of omentum in the sac. He was under the impression that the question was settled with regard to the advantages of not dividing the sac. He had found in the last number of Langenbeck's Journal a statistical table of the operations for hernia, and he believed that the operation without dividing the sac resulted in recovery nearly in the proportion of two to one of the other method. In conclusion, he related the following case, which, as far as his experience went, was unique. He operated upon a man with direct inguinal hernia. The strangulation had existed for twenty-four hours, and the physician in attendance had, for the most part, depended upon simple cold produced by the evaporation of ether previously poured upon the tumor. When Dr. Detmold arrived, there was no chance left for reduction save by an operation. The patient was accordingly put under the influence of ether, and the operation proceeded with in the usual way. He found difficulty in repositing the strangulated parts, which rendered necessary the division of the sac. There was then found among the folds of the intestine a large coagulum of blood. This was evidently due to a rupture of some small vessel, although no force was used in any of the efforts made to reduce it by taxis. He had frequently met with cases where a bloody serum and offensive fluid had been discharged under similar circumstances, but never before had he met with a coagulum of blood in that situation.

Dr. Post, in reference to the reduction of strangulated hernia *en masse*, related the case of a gentleman who met his death in consequence of such a state of things. The gentleman, who had previously been afflicted with hernia, found one day that it had become strangulated. He resorted to taxis, and thought that he had succeeded in reducing it. The symptoms of strangulation, however, continued unabated, and he died shortly afterwards. On post-mortem examination, the hernia was found to have been reduced *en masse*, the strangulation of course being unrelieved. A wax cast of the specimen is in the Museum of the College of Physicians and Surgeons.

Dr. Post, in further remarking upon the general subject of hernia, referred to a class of cases which were quite peculiar in their general characters, and which he thought might frequently be mistaken for other troubles. The first case occurred in his own practice fifteen years ago, while in attendance at the N. Y. Hospital. A seaman was brought into the hospital who, two or three days before his admission, had been engaged in making violent exertion at the capstan, and, as the result, a large tumor of the scrotum made its appearance. Immediately after the occurrence he was taken to a boarding-house, where he remained three days. At the time of his admission into the hospital the whole of one side of the scrotum was filled with a tumor nearly as large as the two fists, hard and resisting, tender and painful on pressure. Attendant upon all this was vomiting, constipation, and considerable tympanitis. The patient was brought into the hospital two or three hours before the public visit, and it happened that day that a consultation of the surgeons had been called in another case, and all who were there present were asked to see this patient. There were some peculiar circumstances connected with the case: in the first place, the patient had not suffered previously from hernia; secondly, the tumor had a peculiar shape precisely like that of a swelled testicle, and the appearance and feel of the tumor were such as to confirm such a suspicion. On submitting the case to the surgeons, none of them were prepared to believe that the swelling was caused by a hernia. One surgeon of great eminence stated his willingness to stake his professional reputation against its being hernia, maintaining that the seaman was mistaken as to the manner in which the accident happened, and that the capstan had struck the testicle, giving rise to traumatic orchitis. Other members of the consultation seemed inclined to concur in this opinion; but it was finally agreed upon to perform an explorative operation. This was done by Dr. Post, who found a strangulated hernia, and after relieving the stricture, returned the contents of the sac. Peritoneal inflammation had set in, and the patient died iu the course of two or three days after. The sac was the tunica vaginalis testis. Since that time a similar case has occurred to Dr. Knight, of New Haven. Dr. Post has also within the past few years seen five other cases, whose characters and general appearance were precisely identical with the one thus described. His idea is, that in these cases there is a congenital deficiency of the septum, and on violent exertion the intestine is forced down, and being within the envelopes of the testicle, causes the tumor to assume the form of that organ. He was not aware that the attention of the profession had been called to this particular variety of hernia before he had met with his first case.

Dr. Stevens, in referring to a case of a large strangulated umbilical hernia upon which he operated with success, stated that a very good director could be extemporized by a quill split on one side longitudinally, and plugged up at one extremity by means of some wax. A penknife could also be made to answer for a bistoury.

The Academy then adjourned.

Stated Meeting, March 4, 1863.

DR. JAMES ANDERSON, PRESIDENT, IN THE CHAIR.

DISCUSSION ON STRANGULATED HERNIA.

(Continued.)

Dr. Post :—I wish to refer to one more additional point, in connexion with hernia, viz. the influence of position in taxis. I have seen a number of instances in which the taxis had been attempted in the ordinary position, and had failed, and in which all the preparations had been made for the performance of the operation, when, by having a strong assistant elevate the lower extremities over his shoulders, the strangulated portion was easily reduced. I know of one instance under the care of tho late Dr. Kearny Rodgers. He attempted the taxis with the usual auxiliaries, and, failing, had appointed an hour for the operation. I requested permission just before he was about to operate to have the patient placed in that position. One of the nurses then stood over the patient, and elevated the lower limbs in the manner that I have indicated, when the hernia returned with great ease. That is one of a number of cases in which the same method has succeeded when the ordinary method has failed. I think that an exaggerated importance is attached to the use of the warm bath as an adjuvant to taxis.

I have seen strangulated hernia reduced under the influence of the relaxation occasioned by bloodletting. I remember very well a case under my care at the New York Hospital, in which the usual means had been tried, and in which, in the failure of such means to produce the desired effect, it was decided to perform the operation. The operation was necessarily delayed a few hours, as I was compelled to leave the patient for that period. I directed that in my absence a number of leeches should be applied over the hernia, and when I came back I found that there had been a spontaneous reduction of the strangulated mass.

Dr. Hutchison, of Brooklyn, wished to call the attention of the Academy to the operation for the radical cure of hernia, more especially for the purpose of listening to the experience of others upon the subject.. He thought that probably the truss was the instrument most used, its object being to crowd together both walls of the sac, producing adhesive inflammation. He was confident that the frequent failure of this instrument in producing a radical cure was due to several reasons. In the first place, surgeons were too much in the habit of sending their patients to instrument makers, who had no idea of the indications that were to be fulfilled. Dr. Hutchison had occasion, while examining persons claiming exemption from the draft, to notice the great evils of such a practice, and in one case, particularly, the testicle of one side was atrophied to the size of a pea by the pressure of a pad directly over the spermatic vessels. The object of the truss is to obliterate the sac at its opening, viz. at the internal abdominal ring, but too frequently, by the slipping of the instrument simply, the external abdominal ring is closed, leaving the other open, the patient being constantly liable to a return of the difficulty. The proper place, then, for a truss is directly over the internal abdominal ring and inguinal canal, and where this is done, in a large proportion of recent cases the hernia is radically cured. The operations that have lately been advocated have the same object in view, viz. the obliteration of the sac. Dr. H. performed such an operation in eight cases—in six by Dr. Riggs's instrument, one by Dr. Armby's instrument, and one by a modification of Dr. Davis's instrument. In three of the cases the hernia was congenital. In the cases operated upon by Dr. Riggs's instrument the results of only four could be obtained, and of these in three the disease returned, one at the end of one month, one at the end of two months, and the other at the end of seven months. Dr. Riggs's instruments consist of a curved canula carrying a needle, the extremity of which is armed with an eye. The canula is passed up the canal invaginating the integument as far as the internal ring, when the point of the needle is pushed through the skin at that point. A small skein of silk is then passed through the eye of the needle, and the instrument being withdrawn, a seton is thus introduced through the whole length of the inguinal canal. Dr. Armby's plan is very similar to Dr. Riggs's, with the exception that but a single thread is passed through the canal instead of a number of them. Dr. H. has operated by this method but once, and then he modified it by replacing the thread by an iron wire. He found that the amount of irritation produced was very much more than that occasioned by any other seton. In this instance the cure was complete. The operation by the modified Wurtzer's instrument was satisfactory; whether permanently or not, Dr. H. could not positively say. He gave the following description of the instrument, as modified by Dr. Redfern Davis, of Birmingham, England. The plug, instead of being one piece, is made so that the lower half is capable of expanding. The advantages claimed for the instrument are, that a force is exerted on the posterior portions of the invaginated integument, canal, and rings, bringing them in close apposition, one with the other, at the same time that the superior layers are compressed by the upper portion of the plug. This antero-posterior compression of the invaginated structures blocks up the canal more efficiently than mere compression of the anterior layers by Wurtzer's instrument, and hence the gut is less liable to slip down into the interspace behind the plug. A single Davis's instrument will answer for all cases, because it can be enlarged by expanding the plug to any size. In using Wurtzer's instrument it is necessary to have at least three sizes, on account of the varying size of the canal and rings in different subjects.

Dr. Minor, of Brooklyn, spoke very highly in favor of the suspension of the limbs as a means of reducing strangulation, and was disposed to refer the result to the gravitation of the blood on the one hand, and the traction of the intestines upon the strictured part on the other.

In answer to the question as to the degree of gangrene which could safely be returned into the abdomen,

Dr. Buck remarked that when the intestine had given way or was about to give way, he would not return it, but when it presented merely suspicious-looking livid spots he should replace it, expecting that adhesion would take place before there would be time for perforation.

Dr. Bell, of Brooklyn, referred to a case of strangulation which he had just operated upon, which was remarkable on account of the size of the hernia, it being nearly as large as an adult's head. The mass had been strictured for eight hours.

Dr. Bissell, of Montrose, Penn., also related the history of a case of strangulated hernia which he had operated upon some years ago, which was peculiar in the respect that the gangrenous gut was returned, and the patient recovered.

Dr. Detmold remarked that the mere reversion of the position of the body was by no means a novel procedure, as it had long ago been advised by writers upon surgery, some of whom recommended that the patient should be tied for a time to a ladder with the head downwards. He referred to a case of femoral hernia in a female whom he was called to see in consultation. When he arrived he found the medical attendant leisurely walking up and down the room, with the patient slung over his back head downwards! In this instance the hernia was not reduced. He had occasionally succeeded in reducing strangulations in children by suspending them by the feet. Dr. D. also cited a case of strangulated hernia, which illustrated forcibly the beneficial effects of chloroform. He was called to see a case of strangulated femoral hernia in a female. Reduction could not be effected, and the operation was determined upon. While getting ready to perform it, the husband came in partially intoxicated and refused to have it done. After Dr. D. had returned home the husband changed his mind, and desired the operation performed. Dr. Noeggerath was requested to see the patient, and when he put his hand upon the tumor he found that the hernia was already reduced. Dr. Detmold thought that one reason why there were so many failures to effect a radical cure by the use of the truss was, that it was not worn at night. His old preceptor, the elder Langenbeck, used to cure the majority of cases of hernia by the use of a truss, but he always applied it himself, and made very firm pressure at the time upon the part with the instrument. The pressure was sometimes so firm that excoriation and even slight sloughing of the integument resulted. The operation by Wurtzer's instrument he had performed half-a-dozen times, but with not a single good result.

In the early part of his career he was consulted by a young married lady to perform an operation for the radical cure of a femoral hernia. Her husband had left her because he suspected that "she was not as she should be," and she was very anxious to have something done. This was at the time when none of the special operations were known. He concluded, however, to operate as if the part were strangulated, and excite inflammation by inserting into the wound a piece of lint dipped in some irritating liquid. The result was perfectly satisfactory, and with the cure of the femoral rupture there was also a cure of the family rupture, "and they both lived happily together." This was the only case that he had seen attended with any good result from an operation. In conclusion, he spoke encouragingly of the use of the oil of cloves as an irritating injection into the sac.

The Academy then adjourned.

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Oakum.—This article is now quite extensively used in many hospitals as a dressing for wounds, and has thus far proved a very excellent substitute for picked lint. It facilitates discharge, while at the same time it acts as a grateful local stimulant.

American Medical Times.

SATURDAY, AUGUST 29, 1863.

PRIMARY EDUCATION OF MEDICAL STUDENTS.

Improvement of our system of medical education has justly been regarded as the most certain and most direct method of elevating the character of the profession. Though this subject has been discussed until it is threadbare, still but little real progress has been made. The schools, it is true, have lengthened their terms, and increased the number of their professorships to meet the immediate demands of the times, yet the great and most glaring defects remain, and effectually prevent all real advancement.

One of these defects, and the only one to which at this time we wish to call the attention of the profession, was recently brought prominently forward by Dr. Bauer, the Health Officer of Brooklyn. In his official capacity he denied the validity of a certificate of death which was marked by orthographical and grammatical errors, taking the ground that the writer thereby showed such a defective education that he could not be a qualified medical man. He accordingly directed the coroner to hold an inquest upon the case. The sequel proved the correctness of Dr. Bauer's conclusion. The medical attendant, though a *legally* qualified practitioner, was a quack, having graduated at a chartered eclectic school.

The educational test here practically applied to the profession, illustrates in a striking manner one of the most serious defects in our system of medical education. We overlook entirely the primary education of medical students, and place our diplomas within the reach of the most ignorant and incompetent. The meagre requirements for graduation which the schools have instituted invite rather than deter the poorest class of students, and those who are no students at all. As a consequence, thousands of ignorant, immoral, and incapable persons go through these prescribed forms, and are in due time invested with the rank and privileges of doctors in medicine. Every session of the medical colleges swells the number of this class of graduates, until they have reached a fearful sum total. It is not strange that the popular saying should run thus—"He is good for nothing else but to become a doctor!"

Nothing can be more obvious than that the honor, dignity, and social position of every profession must depend entirely upon the primary qualifications and education of those who engage in its pursuit. It matters little how stringent or how thorough is the course of instruction, if the student is intellectually incompetent, or educationally unqualified. He can never become truly learned in the science which underlies professional excellence. Whatever may be his other merits or virtues, he will certainly degrade the profession which he enters, and bring it into disrepute. Every profession but that of medicine has recognised these truths, and endeavored, with more or less success, to apply the proper remedy. They have carefully scrutinized the claims of each applicant to a place in their order, examining critically as to intelligence, morals, primary education, etc. These professions have reaped the rewards of their vigilance. They have maintained in every community, however refined or cultivated, the highest social position, and have commanded the largest share of respect. But the medical profession, with all its social advantages, embracing the largest circle of human learning, and ministering constantly to the temporal interests of man, seems doomed to rank inferior to that of other professions, and sometimes little above that of the most common handicraft.

It cannot be denied that society has good grounds for forming so mean an opinion, so low an estimate of the educational qualifications of medical men. They judge the character of the whole body by the many examples of physicians whose general education is much inferior to that of the more prominent and respectable citizens. We may be thought to be too sweeping in our statements of the prevalent deficiency in the primary education of medical men, but a large correspondence with the profession, extending over many years, bears us out in the assertion. We would not care to see the profession of any city or section of the country publicly brought to the test made by Dr. Bauer, viz. that of writing correctly. This is a humiliating confession to be made in regard to a learned profession, but it is time we fully appreciated these facts, and attempted the necessary reform. The first and most important improvement in our system of medical education is clearly that of compelling a thorough preliminary examination of every student as to his qualifications for the study of medicine. This examination should not be limited to his primary education, but should rigidly scrutinize his moral and intellectual qualifications; and the standard of primary education established should be so high that the candidate would hereafter find no superiors in the best educated and most cultivated communities. The agents by which this preliminary examination should be made are the schools. At the commencement of every session they should examine each student who presents himself, and determine whether or not he has the requisite qualifications for commencing or pursuing the study. If he is found deficient, admission should be refused until he has properly qualified himself. We commend this subject to the medical colleges. If they would unitedly adopt the plan of preliminary examinations, they would render a most essential service to the profession.

THE WEEK.

A Parliamentary inquiry into the Prison Discipline of England has elicited some interesting facts in regard to the relation of the punishment to the dietary. The Committee was desirous of reducing the article of meat to a minimum, but Dr. Edward Smith, to whom the Committee referred the physiological questions, took the ground that "Food is assimilable, other things being equal, in proportion to the vital stimulus acting in its transformation. This vital stimulus may be given to the body either by the nitrogen which is contained in the food or by the temperature of the season and bodily exertion; as is proved by the facts that with inactivity of body food of an animal nature is more needed, whilst with cold weather and exertion the desire for food and the consumption of food are greater. Hence exertion, whilst increasing the requirement for food, enables the body to digest and assimilate farinaceous and the less nitrogenized foods, and so far may be regarded as rendering the administration of so large a quantity of nitrogen unnecessary. In fact, he would compel the digestion of bread and the cheaper foods by a proper amount of exertion rather than by an increase in the nitrogenized and dearer foods. The principle is one admitted in ordinary life; for the laborer can eat his crust and drink his water with relish, and keep in health upon it, whilst the idle man needs savory dishes, nitrogenous foods, and perhaps alcoholic stimulants, to give appetite to digestion. Dr. Smith would make such an amount of exertion a normal part of every sentence as shall insure the digestion of the cheaper foods, and increase the dietary with the further increase of exertion which the punishments to be selected should be proved on experiment to demand."

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A writer in the *London Med. Times and Gaz.*, dating from the battle-field near Gettysburg Pa., tells some wholesome truths which are needed in that quarter. Comparing the treatment of wounded prisoners by the Unionists and Rebels he says:—

> I have seen now Confederate wounded in the hands of the Federals, and Federal wounded in the hands of the rebels, and I cannot but say that in acting the good Samaritan the north bears off the palm. At Chancellorville battle the rebels removed their wounded to be cared for at Richmond, leaving the 1200 northern wounded to lie upon the field. The rebel soldiers near them gave them what help they could, but the rebel government did nothing—but confiscate the captured Surgeons' cases and Hospital knapsacks, looking upon them as Government property. On the misery being represented to those in authority, sugar, flour, bacon, and hard bread were plentifully issued to the wounded. This was all, they said, they could give, because it was all they had. Still, they could have done more; they could have removed these 1200 men to Richmond along with their own wounded, to fare as they fared; they could have sent a detail of Surgeons from their army at Fredericksburg to attend to them; and, from Richmond—only a couple of hours away by rail—straw, at least, might have been sent for them to lie upon. What would have been said had the Unionists acted similarly at Gettysburg?—had they removed their own wounded by rail, and left 10,000 rebels to lie upon the field with simply hard bread, bacon, sugar, and flour to sustain them, and with no Surgical assistance, save the dozen Medical men whom Lee sent over to take care of them? Had this been done, God help the Yankees! we would never have heard the end of it.

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It is reported that there is some difficulty experienced in securing surgeons and assistant-surgeons for the colored regiments, while the line officers are in excess of the demand. Whatever may be the scruples of surgeons about joining these regiments, it is apparent that the negroes are fully demonstrating their ability to become first-class soldiers. They are already distinguished for their discipline, courage, and subordination. Surgeon James Bryan, who recently inspected the regiments in the south-west, says:—"The officers in command, without exception, spoke to me in the highest terms of the discipline and courage of their men. Some went so far as to say that they would prefer leading a black to a white regiment." There can be no doubt that the position of the surgeon to a colored regiment will be as pleasant as in the best white regiments. And more permanent. Whatever may be the future policy of the Government, there can be no doubt that colored troops will continue to be a part of the permanent military organization of the country.

Reviews.

The Pharmacopœia of the United States of America; Fourth Decennial Revision. By authority of the National Convention for revising the Pharmacopœia, held at Washington, A.D. 1860. Philadelphia: J. B. Lippincott & Co., 1863.

We are happy to announce that the labors of the Committee of Revision and Publication of the new Pharmacopœia are at length closed, and that this authoritative manual is now placed before the profession. The many improvements that have taken place within the last ten years made a thorough and complete revision of the Pharmacopœia indispensably necessary, and the duties of the Committee were necessarily more laborious, since many changes of an important character needed to be brought about with deliberation and prudence. The Committee have held their numerous meetings at Philadelphia, and when it is understood that but one-half only of their number were residents of that city, too much commendation cannot be awarded them for their punctuality and earnestness. The present volume has truly been a scientific labor of love.

The improvements and alterations that are made in this volume are briefly adverted to in the preface, which is a model of classic perspicuity and brevity. One great improvement is particularly noticed throughout the whole volume, and that is, that plain and simple tests are given wherever they can be applied to ascertain the purity of the various substances, and to point out ready means for the detection of adulterations, and these tests in all instances are such as can be readily applied by every competent pharmaceutist, and by most physicians. The necessary experiments to ascertain these simple tests must have cost various members of the committee much valuable time.

There is a great improvement in the preparation of most of the extracts from that adopted in the last volume; the process of percolation is mostly used, and larger quantities of alcohol are employed to exhaust the menstruum. The improvement in the preparation of the compound extract of colocynth is very great, giving a much more definite and reliable article.

A number of formulæ for the preparation of fluid extracts appear in this volume, which were entirely unknown in the last. Within the last few years much has been written in favor of these preparations by both physicians and pharmaceutists, and the endeavor has been to present something more definite than the old tinctures, which could be given in smaller quantities, but containing more of the active principle of the medicine employed. These preparations also have been rendered less objectionable to the taste of the patient than the tinctures, decoctions, and infusions formerly employed. But while they are an improvement upon the tinctures, decoctions, and infusions, which they are in a great measure intended to supplant, are they perfect in their preparation; and do they contain all of the active ingredients of the medicine they represent; and do they not in many instances contain an abundance of inert materials which add only to their bulk, not to their activity?

The object of all these fluid extracts is to furnish in a conveniently concentrated form the whole medicinal power of the medicine they represent; and to arrive at this point, solvents of various strength are employed, such as stronger alcohol, alcohol, diluted alcohol, water, etc. etc. Let us examine a few of these fluid extracts, and see whether the desired object is accomplished; first,

"Fluid Extract of Ipecac.—Take of ipecac, in fine powder, 16 troy ounces; acetic acid, a fluid ounce; alcohol, water, each, a sufficient quantity. Moisten the ipecac with six fluid ounces of alcohol, introduce it into a conical percolator, press it firmly, and pour alcohol upon it until three pints of tincture have slowly passed, or until the ipecac is exhausted. Distil off the alcohol from the tinctures by means of a water-bath until a syrupy liquid is left. Mix this with the acetic acid and ten fluid ounces of water, boil the mixture gently until it is reduced to half a pint, and the resinous matter has separated. Filter the liquid when cold, and add sufficient water through the filter to make the filtered liquor measure half a pint. Lastly, mix this with half a pint of alcohol."

It will be seen by examining this formula that the object is to extract from the ipecac the *emitia*, as well as the whole of the resinous principle contained in the root. Then, acting upon the belief that the *emitia* is the only emetic and expectorant required to be used, the alcohol is removed by distillation, and the resinous matter is, of course, precipitated. Acetic acid and water are added to the semi-fluid residuum, and boiled to render the *emitia* more soluble, and to more readily separate the resinous matter. The menstruum is then filtered to completely separate the resin, and an equal quantity of alcohol is added merely to preserve the fluid from decomposition.

This formula certainly makes an addition to the pharmacopœia, but is it any improvement upon what it is expected to replace or supersede? Is the whole of the active principle obtained and *retained* in the fluid extract? If not, we certainly need a better formula! The fact simply is, that the resin which is at first exhausted from the root, and then rejected and thrown away, *is a better and more reliable emetic than the fluid extract!* An etherial solution of this alcoholic resin is also a reliable and certain emetic, and a solution of the resin in caustic potash is also emetic.

Thus, even if we have in this fluid extract of ipecac a uniform and reliable emetic, to obtain it we have rejected and wasted a large amount of the active emetic principle of the root; and thus it will be plainly perceived that we need a better formula—one which will contain the whole emetic principle. Let us turn to one other, and this will answer as a type of many of these fluid extracts:—

"Fluid Extract of American Hellebore.—Take of American hellebore, in fine powder, sixteen troy ounces; alcohol, a sufficient quantity. Moisten the hellebore with six fluid ounces of alcohol, introduce it into a cylindrical percolator, press it firmly, and gradually pour alcohol upon it until half a pint of tincture has passed. Set this aside, and continue the percolation until two pints and a half more of tincture have been obtained. Evaporate this by means of a water-bath, at a temperature not exceeding 150°, to half a pint; mix it with the reserved tincture, and filter through paper."

It will be seen by this process that the root is gradually exhausted by alcohol, and that the first half pint of tincture that passes is reserved to become a solvent of the remainder after evaporation. But in this evaporate, now reduced to half a pint, the whole fluid portion of which is water, for the alcohol has been driven off by heat, we have not only the precipitated resin and alkaloid, but we have, in addition, a large quantity of mucilaginous and watery extractive that have been taken up by the water contained in the alcohol. To this evaporated portion, now half a pint, we add the first half pint of tincture obtained—and what is now the result? The alcohol of this half pint of tincture, now mixed with an equal quantity of semi-fluid mass containing no alcohol, precipitates a great portion of the resin that it held in solution; it is too weak to dissolve that already precipitated by evaporation of the alcohol, and the result is that, when it comes to be filtered, a very large portion of the resinous matter is left behind, and the fluid extract contains a large proportionate amount of watery extractive, and some of the alkaloid. The object of the formula is to make it contain the whole of the active principle of the root first treated, and if it does not contain this, the formula is inaccurate, and needs perfecting.

We find that, by treating the rejected precipitate with strong alcohol, we have a more reliable and certain sedative than that contained in the fluid extract, and that this tincture is not liable to alterations, deterioration, and precipitation, as is the fluid extract. Here again, then, as in the case with the fluid extract of ipecac, we have an uncertain preparation, and a formula that wastes a large amount of the active principle of the drug.

Now, it may be asked—How can all this be made more certain and reliable? We will essay in this instance to give a formula that we think would be liable to fewer objections than the one given in the pharmacopœia, though we conceive that almost every substance requires a separate formula for its preparation.

FLUID EXTRACT OF AMERICAN HELLEBORE.

Take of American hellebore, in fine powder, a sufficient quantity; stronger alcohol, sp. gr. 0·817, a sufficient quantity. Moisten the hellebore thoroughly with the alcohol, and press it into a percolator; close the bottom of the percolator so that no fluid can escape, and add sufficient alcohol to cover the root; cover the percolator, and let it stand twenty-four hours; then withdraw the cork, and allow percolation to proceed, gradually adding alcohol until tho root is exhausted. Distil, and evaporate on a water-bath, until a solid extract is obtained that may be rolled into sticks. Dissolve one part of this extract in ten parts of stronger alcohol, and filter. This fluid extract will be found to contain all the medicinal principle of the root. We have used it many years, and have always found it uniform in its action. Other fluid extracts require very different formulæ for their preparation, depending upon the composition of the substance from which they are made, and the solubility and volatility of their active medicinal principle.

Under the head of Ferrum we have formulæ for the preparation of the newer valuable preparations of iron.

At present it would hardly do to leave out entirely both decoctions and infusions, but by the time of the next revisal we have no doubt that it will be done, and the same may be said of the various medicinal wines.

The suggestion of Mr. Meakim to make a pronouncing vocabulary of the index is very appropriate, and although it has delayed the forthcoming of the book, it will be found of very great value to students.

Mr. Proctor's suggestion to make the work so cheap as to insure its general use by physicians and apothecaries, is a forcible reminder for all to own it. Every physician and apothecary in the United States will be both interested and instructed in perusing this volume well, for great improvements have been made in every department of the book. Every page is a tablet to the industry and science of the Committee who labored so perseveringly upon it.

Correspondence.

AMPUTATIONS AND RESECTIONS—CONSERVATIVE SURGERY.

[To the Editor of the American Medical Times.]

Sir:—I present for your consideration a few thoughts in connexion with the subject of military surgery, a branch of general surgery, just now, of paramount interest, and in all likelihood will continue to be the subject of the deepest interest for a long time to come. You will remember that, at the late meeting of our State Medical Society, I read most of a letter which I had recently received from Dr. Alex. H. Hoff, late of this city, but now in charge, as the medical officer, of the United States Transport Hospital Steamer "D. A. Janeway," plying on the Mississippi river, and used for conveying wounded and sick soldiers from point to point.

Before reading the following letter I remarked that, as "conservative surgery" seemed to be the order of the day, I would leave it for the Society to decide what constituted "conservative surgery" in its widest and most beneficent sense—whether in resection of compound comminuted fractures, or in treating such cases in the old-fashioned method by support, water-dressings, compresses, cleanliness, etc.

Dr. Hoff solicited my views in reference to "resection." I replied by stating some facts which came under my observation in May, 1862, while I was engaged among the hospitals at or near Fortress Monroe in attending to the wounded brought from the battle-field of Williamsburgh. It is true that my experience was somewhat limited, but I became readily convinced that *secondary* amputation through the thigh was not warrantable.

Dr. Lente, who was the first and only Surgeon-in-charge of the Mill Creek Hospital, just opened for the reception of surgical cases only, at the time of my arrival (on the Sabbath morning of the blowing up of the Merrimac, and of the evacuation of Norfolk), amputated through the middle-third of the thigh; and although the operation was not protracted, yet the patient died upon the operating-table before the stump was dressed. In the case of a patient of mine, where the circumstances (a shattered femur into the cavity of the knee-joint, with profuse suppuration) seemed to demand prompt amputation above the seat of the disease (which brought it through the upper third), the patient lived long enough to have the stump dressed, and to be removed from the operating-table, though he died in a few minutes thereafter.

From the result of these cases we arrived at the conclusion, that *secondary* amputation through the thigh could not be advocated and practised with the least hope of prolonging the life of the patient.

Dr. Bontecou, who was located at the Hygeia Hospital, had come to the same conclusion; and, as a substitute for amputation, was practising resection of the extremity of the shattered femur, in cases of compound and comminuted fractures.

I assisted him in two such operations, which he accomplished dextrously and, apparently, successfully, at least for the time being, with the aid of a Paris manufactured chain-saw which I furnished him. I was informed that he performed ten or twelve similar operations in the course of four or five days. I saw that his patients did not die immediately after completing the operation, and, therefore, recovery seemed to be more promising than amputation.

While I remained on the Peninsula I did not learn the result of Dr. Bontecou's operations. But some weeks after I ascertained through Dr. Brinsmade, of Troy, who was with me at Fortress Monroe, that at that date only one of the patients, upon whom resection of the femur had been performed, was living.

Thus it would appear that resection afforded but a small chance of ultimate recovery, but a trifle better than amputation, assuming that the patient, alive at the time of the report, ultimately recovered, an assumed time hardly warrantable in view of the wholesale fatal results in the other cases.

Such was the substance of my experience and views as expressed in reply to the inquiries of Dr. Hoff, and which appear to be fully sustained by one largely experienced in military surgery, one whom I knew to be anxious, and even ambitious to use the knife freely, and did so at the commencement of the war. These views will be further corroborated in his next letter.

I commend the frankness and candor of sentiments expressed in the letters of Dr. Hoff to the careful consideration of those who claim so much for, and prate so much about "conservative surgery" Yours, etc.,

Alden March, M.D,

Albany, N.Y., Aug. 10.

Sir:—I am at present in charge of a large hospital steamer transporting the sick and wounded from one point to another on the Mississippi river. I see a multitude of sick and wounded, but for so short a time that one or two dressings, and now and then an operation, are all of interest that come under my observation. I am heartily tired of amputations, more especially of the thigh, and, with one or two surgeons, have attempted to save limbs as well as lives by calling in Dame Nature, and attempting to assist her, and this, I am happy to say, with a success far beyond expectation. We lose our amputations; almost every one dies: on the other hand, more than three-fourths recover. Resection in the continuity of bone, as a primary operation, is being much lauded. We have made no such operation, as we have found in some hundred cases that recovery takes place just as soon, and with as much comfort to the patient, as in an ordinary compound fracture; and what is quite singular, but few spiculæ of bone are discharged, although quite large fragments have been felt in the wound by the introduction of the finger, which we denominate our probe, as it has been found that our Enfield rifles, etc., make plenty of room. I am not going to denounce resection, but this dissecting off periosteum from fragments, to remove them, appears pretty, but is rather unnecessary. Will it not, if attached, nourish? On the other hand, if there be much suppuration, how much better will the periosteum left behind fare if detached from the bone? The splint used by Prof. Hodgen of St. Louis, at the Fifth Street Hospital, is, I think, a very comfortable as well as useful affair. It leaves the limb exposed, if you choose; if not, it can be bandaged with a many-tailed bandage without disturbing the position. The extension and counter-extension can be made in accordance with the views of the Surgeon-in-charge. The advice I have often heard you give has been of great service to me. A good jack-knife and some shingles, with ingenuity, will accomplish all that is required in the way of splints. I should like to have your views in relation to resection of the long bones in their continuity, as a primary operation, in a compound comminuted fracture caused by a rifle-ball. I have seen so many singular results from wounds, and so different from what I had reason to expect, and from what I have read, that I am beginning to think military surgery is all out of joint.

Yours, etc.,

Prof. March. Alex. H. Hoff. M.D.

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HODGEN'S SPLINT

IN THE TREATMENT OF GUNSHOT FRACTURES.

[To the Editor of the American Medical Times.]

Sir:—Inspector Vollum, of the Medical Department U.S.A., has requested me to call the attention of the profession, through the columns of your excellent Journal, to the great value of Hodgen's splint in the treatment of gunshot fractures (compound comminuted) of the thigh and also of the leg. The superiority of this splint over all others for the treatment of this class of injuries consists—1st. In the degree of comfort which it affords the patient. Sufferers with gunshot fracture of the femur, who had been treated for a time with other splints, have uniformly expressed a sense of great relief on the substitution of Hodgen's splint. 2d. In the readiness with which extension can be made and regulated, and continued as long as required, without producing excoriation or ulceration from pressure. 3d. In the facility which it affords for inspecting the injured limb, and for examining the wounds. 4th. In the opportunity which it allows for applying topical treatment, such as irrigation, ice, etc.; and, 5th. In the facility which it gives for removing soiled dressings, etc., without disturbing the injured limb.

We have recently employed this splint at Stanton Hospital in the treatment of thirteen cases of gunshot fracture of the femur, and ten cases of gunshot fracture of the tibia. From this experience I am thoroughly convinced that Hodgen's splint fulfils the indications for treatment in cases of gunshot fracture (compound comminuted) of either the femur or the tibia, better than any other apparatus which has come under my notice, and on that account I earnestly recommend it to the consideration of all surgeons who treat this class of injuries.

A description of this apparatus, and the mode of its application, illustrated with a drawing, can be found in the AMERICAN MEDICAL TIMES for May 23, 1863, p. 245.

Yours, etc.,
JOHN A. LIDELL,
Surgeon U.S.V. in charge.

STANTON HOSPITAL, Washington, D.C., Aug. 20, 1863.

CALOMEL AND TARTAR EMETIC IN THE ARMY.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—The order of the Surgeon-General directing calomel and emetic tartar to be struck from the Medical Supply Table of the Army, has elicited remarks which appear unjust, and neither calculated to benefit those immediately concerned, nor to advance the cause of medical science.

It seems quite useless for writers to accuse those who differ from them of fanaticism on the one hand, or old-fogyism on the other. That it is the duty of the Surgeon-General to do all in his power to preserve the lives and improve the health of those committed to his care, there can be no doubt. That he should do this conscientiously, uninfluenced by any who may have other motives in view than the good of the soldiers, is equally clear. That he is bound to give the public the statistics in detail upon which his decisions are founded, cannot be admitted, as it might expose to censure respectable and useful surgeons who have exercised ordinary skill and care in the discharge of their duties. To use calomel and tartar emetic without injurious effects, requires more skill and greater care than can always be expected in the army. That mercury has been administered to soldiers to an injurious extent, and in cases where it ought not to have been prescribed, is undeniable. Cases have come under my own observation which prove this. Among these are patients with Bright's disease, treated perseveringly by mercury to within a few hours of a fatal termination, on the supposition that the disease was in the liver. It is not supposed that this order will entirely correct this abuse, but it will evidently do good; because calomel is not an indispensable agent, and in ordinary doses it often operates in a violent and unexpected manner, and for this reason is more liable to do injury than other forms of mercury used with the same care.

Physicians may be found in some sections of the country who rarely treat any acute disease without calomel. These gentlemen find the secretions of the liver too small or too great in nearly every case, which can be made right only by the intelligent agent, mercury, which increases or diminishes the action of the liver as may be required, and hence it saves the trouble of exercising reason and common sense.

It seems worth while for those who make so much complaint of the Surgeon-General's order to show that some cases of salivation and gangrene of the cheeks have occurred where no mercury has been administered; and, likewise to prove that the depressing influences to which our soldiers are exposed, as malaria, excessive fatigue, exposure to atmospheric vicissitudes, want of sleep and of nutritious and digestible food, tend to cause pathological conditions for which calomel and tartar emetic are remedial; and, likewise, to examine and see whether they may not be paying their devotions to a golden calf, and not to one of the household gods of legitimate medicine. If they do not wish to read modern pathology, they should study pathological anatomy on the recent subject, and learn if some other cause than hepatic torpor cannot be found for diarrhœa. It may not be amiss for these gentlemen, who are so expert in bilious matters, to demonstrate that mercury has a specific action on the liver, and to show the fallacy of the experiments of Scott, Thudicum, and Innman, which go to prove the contrary. It may be well for them to read Frerichs and Budd on the Liver, and see how much authority they can find for treating its various diseases with calomel.

ILLINOIS.

Army Medical Intelligence.

THE MEDICAL INSPECTOR-GENERAL.

WAR DEPARTMENT, ADJ. GEN'L'S OFFICE,
WASHINGTON, August 13, 1863.

The resignation of Medical Inspector-General Thomas F. Perley, is accepted, to take effect August 10, 1863. He will turn over all books, papers, etc., pertaining to the office, to Colonel and Medical Inspector-General J. K. Barnes, U.S.A. Dr. Perley has been appointed Surgeon of Volunteers, or rather reappointed, as he formerly held the appointment. Surgeon Perley will proceed to Portland, Me., and await further orders.

Medical Inspector-General J. R. Barnes will enter upon the duties of his office without delay.

By order of the Secretary of War,
E. D. TOWNSEND,
Asst. Adjutant-General.

SUBSTITUTE FOR PORT WINE.

SURGEON-GENERAL'S OFFICE,
WASHINGTON, August 15, 1863.

CIRCULAR No. 13.—Surgeons-in-charge of hospitals are informed that they can procure a substitute for *port wine*, for the use of the sick, by making proper requisition therefor.

In consequence of the impossibility of procuring pure port wine of the grade formerly issued to the army, an article of Tanagona wine has been adopted for issue instead.

This wine is light, dry, and astringent, and is the pure juice of the grape, purchased by the Medical Department in bond, and bottled at medical purveying establishments.

WM. A. HAMMOND,
Surgeon-General.

HOSPITAL FUND.

SURGEON-GENERAL'S OFFICE,
WASHINGTON, August 15, 1863.

CIRCULAR No. 14.—Upon the monthly statement of the hospital fund required to be forwarded to this office, Surgeons-in-charge of hospitals will hereafter endorse the name, rank, and station of the Commissary of Subsistence by whom the hospital returns are issued.

As large hospital funds have accrued, and remain unexpended in a few instances, Surgeons-in-charge of hospitals where funds may be from any cause insufficient, are directed to apply to this office for the transfer of a sufficient sum to meet their necessities. The application must state the amount needed, and the specific purpose for which needed, and the circumstances causing the necessity. If the reasons given are satisfactory, the transfers asked for will be made.

WM. A. HAMMOND,
Surgeon-General.

ORDERS, CHANGES, &c.

Surgeon John T. Hodgen, U.S.V., has been ordered to report to the Governor of Missouri for duty connected with his appointment as Surgeon-General of that State.

Medical men who wish to join the State Corps of Volunteer Surgeons for service during the exigencies of a battle, should make application to the Surgeon-General of the State in which they are residing.

There are a number of Surgeons and Assistant-Surgeons required for the regiments of U.S. Colored Troops. The pay is the same as that of other regimental medical officers, Surgeons, $163.00, and Assistant-Surgeons, $112 83 per month. They must be examined by a Medical Board previous to appointment, and the general principles of examination are the same as those observed in the examination of Assistant-Surgeons of Volunteers. Application should be made to the Surgeon-General, U.S.A., at Washington, D.C., for permission to come before the Board.

Surgeon J. B. Bellangee, U.S.V., is on duty superintending the erection of a new General Hospital, at Morehead City, opposite Beaufort, N. C., at the termination of the Atlantic and North Carolina Railroad.

Surgeon J. E. McDonald, U.S.A., is on duty as Medical Inspector of the 9th Army Corps, at Vicksburg, Miss.

Assistant-Surgeon W. W. Wythes, U.S.V., is on twenty days' leave at Milton, Del.

Surgeon G. F. French, U.S.V., has arrived at the Headquarters Department of the Tennessee, and has been assigned to duty with the staff and escort of Major-General Grant.

Surgeon G. W. Hogeboom, U.S.V., is in charge of General Field-Hospital Cowan, Tenn.

Surgeon A. M. Speer, U.S.V., is on twenty days' leave at Pittsburg, Pa.

Surgeon John Neil, U.S.V., Medical Director, General W. F. Smith's Division, at Hagerstown, Md., has been ordered to report to Surgeon E. Swift, U.S.A., Superintendent of hospitals at Baltimore, Md.

Assistant-Surgeon E. Dodd, U.S.V., is on twenty days' leave at Babylon, N. Y.

Leave of absence on surgeon's certificate to prevent permanent disability has been granted to Surgeon L. Quick, U.S.V.

Surgeon George Suckley, U.S.V., has been assigned to duty as Acting Medical Inspector, 8th Army Corps, Middle Department.

Surgeon Anthony Hager, U.S.A., has been assigned to duty as Medical Director of the District of St. Mary's, Headquarters Point Lookout, Md.

Surgeon Artemas Chapel, U.S.V., has been assigned to duty as Medical Director, 3d Army Corps, Army of the Potomac.

Surgeon William Hayes, U.S.V., as Medical Director of the forces in defence of Maryland Heights and surrounding country, commanded by Brig.-General Lockwood, Headquarters Harper's Ferry, Md.

Surgeon E. B. Dalton, U.S.V., is awaiting orders at Fort Monroe, Va.

Surgeon W. A. Conover, U.S.V., is sick at Fort Monroe, Va.

Surgeon D. W. Hand, U.S.V., is awaiting orders at Norfolk, Va.

Surgeon J. W. Fitzpatrick, U.S.A., is under medical treatment in Washington, D. C.

Surgeon G. W. Varnum, U.S.V., is on duty in charge of the Hospital of the 15th Army Corps, near Vicksburg, Miss.

Surgeon Charles Mayo, U.S.V., is sick at the Hospital of the 13th Army Corps, near Vicksburg, having been relieved as Medical Inspector of the Corps by Surgeon J. R. Ludlow, U.S.V.

Surgeon Fred. A. Keffer, U.S.V., is on duty at Baton Rouge, La., in charge of the Factory Hospital.

Surgeon Adolph Majer has been assigned to duty as Chief Medical Officer at Beaufort, S. C., relieving Surgeon R. B. Bontecou, U.S.V., who has reported to the Medical Director of the Department of the South for special duty.

Surgeon J. T. Hodgen, U.S.V., has been assigned to the charge of the Hospital Transport "Crescent City," on the Mississippi.

Assistant-Surgeon J. P. Wright, U.S.A., in charge of Washington U.S. General Hospital, will, in addition to his other duties, take temporary charge of the Officers' Hospital.

Acting Assistant-Surgeon J. C. Garland, U.S.A. (now an invalid), is relieved from duty in the Officers' General Hospital, and will proceed to Washington, D.C., and report in person to the Surgeon-General.

Acting Assistant-Surgeon R. H. Brown, U.S.A., is relieved from duty in Washington U.S. General Hospital, and will immediately report for duty to the Surgeon-in-charge of Officers' Hospital.

Acting Assistant-Surgeon J. H. Sharp, U.S.A., having reported to this office, is assigned to Washington U.S. Mil. General Hospital, and will, without delay, report for duty to the Surgeon-in-charge.

Acting Assistant Surgeon H. Bussy, U.S.A., having reported to this office in obedience to orders from Assistant Surgeon-General's Office at St. Louis, Mo., dated August 3, 1863, will relieve Acting Assistant-Surgeon S. Leslie, U.S.A., from duty in Goyoso Hospital.

Acting Assistant-Surgeon S. Leslie, U.S.A., upon being relieved, will repair to Jefferson Barracks, Mo., and report for duty to Surgeon J. F. Randolph, U.S.A., in charge of U.S. Military General Hospital at that place.

Surgeon J. L. Teed, U.S.V., will report in person without delay to Major-General Rosecrans, commanding Department of the Cumberland, and by letter to Assistant Surgeon-General R. C. Wood, at St. Louis, Mo.

By direction of the President, the following named officers are dismissed the service of the United States:

Assistant-Surgeon E. G. Marshall, 124th New York Vols., on account of habitual intoxication.

Assistant-Surgeon Alexander Wilson, 121st Pennsylvania Vols., for absence without leave and drunkenness.

Assistant-Surgeon Alfred House, 14th New York State Militia (84th New York Vols.), having tendered his resignation, is hereby discharged the service of the United States, on account of physical disability, and failure to properly account for his absence from his command, he having rendered but little service to the Government.

A Board will assemble at St. Louis, Mo., on the twentieth day of August, 1863, or as soon thereafter as practicable, to examine and report upon the qualifications of applicants for appointment as commissioned officers of colored troops.

The Board will consist of Colonel D. Houston, 7th Regt. Missouri Vols., Major A. A. Engle, A.D.C., Major L. D. Hubbard, 3d Illinois Cavalry, Captain J. F. Dwight, 4th Missouri Cavalry, and 2d Lieutenant D. W. Whitaker, 10th Regt. Kansas Vols. The junior member of the Board will act as Recorder.

The Commanding General of the Department of the Missouri will detail a surgeon from the volunteer service, to examine as to the physical qualifications of such applicants as may present themselves before the Board for examination.

The Board will continue its sittings from 9 A.M. to 5 P.M. daily, Sundays excepted. It will be governed in its proceedings by the rules and instructions published in General Orders Nos. 143 and 144, War Dept., 1863, and will make reports weekly, or oftener if specially required, of all persons examined by it.

The following officer, having tendered his resignation, is hereby honorably discharged the service of the United States, on account of physical disability :—

Assistant-Surgeon David L. Booth, Mississippi Marine Brigade.

By direction of the President, Assistant-Surgeon John H. Sullivan, U.S.V., is hereby dismissed the service of the United States, for drunkenness and neglect of duty.

Upon the recommendation of the Board of Officers, convened by Special Orders 285, of June 27, 1863, from this office, the following officer is hereby honorably discharged the service of the United States, on account of physical disability :—

Assistant-Surgeon D. A. Moore, 124th Ohio Vols.

Leave of absence is granted the following named officers on surgeon's certificate of disability :—

Hospital Chaplain J. H. Parks, U.S.A., for twenty days.

Assistant-Surgeon G. Reno, 66th New York Vols., for twenty days.

Leave of absence is hereby granted the following officers :—

Surgeon B. A. Vanderkieft, U.S.V., for twenty-four hours, with permission to visit Washington.

Surgeon Zenas E. Bliss, U.S.V., for twenty-four hours, with permission to visit Washington.

Surgeon R. E. Paine, 1st Maine Artillery, for fifteen days.

Surgeon Thomas Sim, U.S.V., having performed the duties to which he was assigned by Special Orders 298, from this office, will return without delay to the Army of the Potomac, and report for duty to Major-General Mende.

The following assignment of medical officers is hereby made:

Assistant-Surgeon C. K. Winné, U.S.A., now on duty at Madison, Ind., to report for duty to the Medical Director, Department of the Monongahela.

Assistant-Surgeon L. S. Comstock, 155th New York Vols., to report for duty to the Medical Director, Department of Washington.

Surgeon Charles H. Crane, U.S.A., now at New York awaiting orders, to report to Colonel W. Hoffman, Commissary General of prisoners in this city, for duties connected with prisoners of war.

The following assignment of medical officers is hereby made :—

Assistant-Surgeons William R. De Witt and Henry W. Ducachet, U.S.V., recently appointed, to report for duty to the Medical Director, Department of Washington.

Assistant-Surgeon George W. Parker, U.S.V., recently appointed, to report in person to the Surgeon-in-charge of General Hospitals at Annapolis, Md., and by letter to the Medical Director of the Middle Department.

Assistant-Surgeon Frank Reynolds, U.S.V., recently appointed, to report to the Medical Director, Army of the Potomac.

Assistant-Surgeon S. S. Schultz, U.S.V., recently appointed, to report to the Medical Director, Department of the Ohio, at Cincinnati, Ohio.

Assistant-Surgeons J. H. Doughty and Nathan P. Rice, U.S.V., recently appointed, to report to the Medical Director, Department of Virginia, Fort Monroe, Va.

Assistant Surgeons P. A. White and Otis M. Humphrey, U.S.V., recently appointed, to report to the Medical Director, Department of the Gulf, at New Orleans, La.

Leave of absence is hereby granted the following officer :—

Assistant-Surgeon W. A. Bradley, U.S.A., for seven days.

So much of Special Orders 309, July 13, 1863, as discharged from service private Arthur Bingham, Co. F, 3d New Hampshire Vols., with a view to his enlistment as Hospital Steward, U.S.A., is hereby revoked.

The Surgeon-General will detail a Medical Inspector to relieve Medical Inspector N. S. Townsend, U.S.A., who is hereby granted leave of absence until October 1, 1863.

Leave of absence is hereby granted the following officer :—

Surgeon D. P. Smith, U.S.V., for twenty days.

So much of Special Orders No. 283, of June 26, 1863, from this office, as discharged from service priv. John S. Parker, Co. E, Purnell Legion, Maryland Vols., with a view to his enlistment as Hospital Steward, U.S.A., is hereby revoked.

Surgeon Madison Mills, U.S.A., is hereby assigned to duty as Medical Director of the Department of the Tennessee, and will report in person without delay to the commanding General, accordingly.

So much of Special Orders No. 107, March 6, 1863, from this office, as dismisses Surgeon E. P. Morong, 2d Maryland Vols., is hereby revoked, and he is restored to his position, provided the vacancy has not been filled.

Medical News.

DEATH OF DR. J. MOORE NELIGAN.—Since our last, the medical profession in Ireland has sustained a blow not easily remediable in the unexpected death of Dr. Neligan, at his residence, Clonmel House, near Blackrock. Although Dr. Neligan had been suffering for some time from affection of the kidney, and had found it necessary in consequence to exchange a residence in town for the country, still no apprehension of immediate danger was entertained till a few days before his death; and he had been enabled within a week to fulfil his professional duties. On Thursday last, he was so much worse that little hopes were entertained of his recovery; and on Friday evening (July 24), he expired from, as we understand, uræmic poisoning, the result of the chronic malady of which he was the subject.—*Dublin Medical Press.*

MEDICAL DEPARTMENT OF LIND UNIVERSITY.—A new College edifice is in course of erection for the Medical Department of Lind University, in Chicago, Ill., to be completed in September, and used for the next annual course of instruction. It is of brick, three stories high, and will combine all desirable conveniences and comforts. The name of this University having been changed by the Board of Trustees to that of *Lake Forest University*, a new name for the medical school became necessary, and the Faculty have given to it the title of the *Chicago Medical College*, by which it will hereafter be known.—*Boston Journal.*

SAMUEL A. CARTWRIGHT, M.D., died near Jackson, Miss., æt. 72., well known for his peculiar treatment of Asiatic Cholera, his papers on the Sugar House Cure of Consumption, Experiments on the Alligator, &c., &c. Dr. Cartwright was long a resident of Natchez, and afterwards removed to New Orleans, whence he communicated to the Northern medical press copiously. We are not informed whether he was connected with the medical staff of the Confederate army, but presume, from his advanced age and kind feelings, in past time, towards the North, that he was not. His death will be generally regretted, both North and South, as a genuine medical gentleman and scholar of the old school.—*Chicago Med. Jour.*

Original Lectures.

DISEASES OF THE RESPIRATORY ORGANS IN CHILDREN.

BEING A COURSE OF LECTURES PREPARED FOR DELIVERY DURING THE SPRING SESSION OF 1862 IN THE COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.

BY THE LATE
C. VAN ALEN ANDERSON, M.D.,
PHYSICIAN TO CHILDREN'S DEPARTMENT, DEMILT DISPENSARY, N. Y.

LECTURE VI.—PART III.

BRONCHITIS.—PNEUMONIA.

Upon auscultation we find that pneumonia is manifested in the child by a subcrepitant râle, by bronchial breathing, by bronchophony, and by dulness on percussion. The true small crepitation which is heard in the pneumonia of the grown person does not occur in infancy and childhood, except when the patient takes an unusually long inspiration, when the air enters the pulmonary vesicles, and a fine crepitus may be distinguished for a moment; when, however, a child breathes in the ordinary manner, the subcrepitant râle is present, and may be regarded as diagnostic of the disorder.

To this râle succeeds quickly enough bronchial respiration, marking the stage of hepatization of the lung. In the child, however, bronchial respiration is not the rough, strong, whistling sound, compared to that produced by blowing air through a quill, which we have in the adult; on the contrary, it is rather feeble and indistinct, and is more allied to the bruit known as rough respiration. It is at first heard in expiration the moment in which the air drives strongly from the chest, vibrates against the walls of the bronchi, and is more clearly conveyed to the ear, both because the vesicular murmur is absent, and because the solidified lung tissue acts as a better conductor of sound. Then it becomes apparent both in expiration and inspiration, and is accompanied by an increase in the resonance of the cry and cough, and of dulness on percussion. The rapidity with which it comes on, and the stage of the disease in which the medical man is called upon, constitute it in very many cases one of the earliest appreciable rational signs.

Coincident with the bronchial respiration, in children who are old enough to enable us to judge by the alteration of the sounds of the voice conveyed through the walls of the chest, will be bronchophony, which most frequently begins with a slight exaggeration of the natural resonance, grows in intensity by degrees, then remains stationary for awhile, and finally, gradually diminishes and dies away. This bronchial voice is manifested in the child at the breast by the resounding of the cry and of the cough, which is easily recognised by the vibration communicated to the walls of the thorax, the ear of the listener at once referring it to a column of air traversing with noise, rapidity, and force, tubes extending through a solid substance.

In a case of pure pneumonia the subcrepitant râle of the first stage disappears entirely when hepatization of the lung has taken place, and bronchial respiration with bronchophony succeed to it. If the termination is to be a fatal one, these sounds become both more distinct and more extensive, prevailing over the whole of the posterior part of the chest, and being audible, also, in front. If, on the other hand, the disease progresses towards resolution, they are replaced from the sixteenth to the nineteenth day by a subcrepitant râle which answers to the resolving crepitus in the pneumonia of the grown person. This change, however, is slow in its advance; a little crepitus is heard at first, which day by day is heard over a larger space, then, by gentle gradations, becomes coarse in its character, like the coarse crepitus of bronchitis, and then is merged in the vesicular breathing, which shows that the pulmonary substance has reassumed its integrity.

There are some particular symptoms of pneumonia which deserve a word or two:

The pain in the side, which is very common in the pneumonia of mature age, if it exists in children, is very difficult to appreciate. In infancy they are unable to express any particular sensation, and percussion of the walls of the chest does not aid us in this instance as it does in pleurisy. When, however, our patients are older, this pain is more frequent and more easily made out. It is dull rather than acute, its duration is not prolonged, and it is increased by the effort of coughing and by percussion.

The most constant symptom is the cough, which is present in all subjects, begins with the earliest stage of the disorder, and lasts through its whole progress. On the first and second days it is short and dry—what is called a hack—then augments in frequency, and at the time of resolution becomes loose and moist. It is not unusual for it to occur in fits like the fits of hooping-cough; but the characteristic hoop is wanting, and the spasmodic expirations are not so intense as in the latter disease. Whether the rust-colored expectoration exists in infants and young children, admits of considerable doubt, but is a point not easy to determine, for the matters which the grown person rejects by spitting, children dispose of by swallowing.

In a disease affecting so profoundly the structure of the lungs, disturbance of the respiration is, of course, a prominent feature. Acceleration of the breathing is remarked from the commencement, especially in children at the breast, and runs up from 40 to 60 in a minute: in older children it rarely exceeds 68. It varies somewhat in its character in different cases, and even in the same case at different times of day; generally though quick it is even and regular, resembling the panting of a dog which has just been running; at other times it is unequal, short, and hissing; and at others, again, the inspiration is normal, while the expiration seems to demand some effort. As the pulse gains more and more frequency in the progress of the complaint, the quickness of the respiration appears to keep pace with it, or that they increase and diminish simultaneously. When the issue of the case is to be an unfortunate one, the breathing grows more and more rapid and difficult, and is associated with a violet color of the face and finger nails, convulsions, coma, and death.

The physiognomy of the child very often affords a clue to the mischief that is being perpetrated within the thorax. We have already referred to the alternate expansion and contraction of the nostrils which accompanies each breath. This movement is observed in nearly every case, is most marked at the commencement of the disease, and bears some relation to the acuteness of the inflammation, and the celerity of the respiration. A bluish coloring may also be remarked about the inferior eyelids in very young children, which becomes more and more distinguishable as the disease advances. The general expression of the face is that of anxiety and restlessness, which, however, towards the end of the attack, is replaced by a sunken and fatigued look which is truly pitiable.

The fever of pneumonia is exceedingly apt to be remittent in character, so much so, indeed, that I have known a child laboring under inflammation of the lungs to be treated by a physician of some experience for ordinary remittent fever. It presents, generally towards evening, a very marked remission, with heat of skin and increase in the frequency of the pulse. The elevation in the temperature of the skin is found, I believe, in no other disorder except scarlatina and typhoid fever, and possesses, as has been already said, a "pungent" feel. The rapidity of the pulse, too, is very great; it ranges from 120 in a minute to 220, which number was once counted by Trousseau. As the case verges towards recovery, this extraordinary frequency gradually fades away; if death approaches, although the pulse loses this character for a short time, it soon regains it, and becomes so swift and small, with the beats running so into one another, that it is an absolute impossibility to reckon it.

Pneumonia in children, then, is a disease which does not often commence abruptly as in the adult, but in the immense majority of cases is preceded by a greater or less amount of bronchitis. It is associated from the first with fever, disturbance of the respiratory function, loss of appetite, a peculiar physiognomy, cough, and certain auscultatory phenomena which in the beginning are not distinctive, but which quickly become so with the advance of the disorder. Its progress is unusually regular, and terminates either in recovery or death: if the former is to be the event, from the sixteenth to the nineteenth day a change is seen in the symptoms; the heat of skin, the rapidity of the pulse and the respiration, gradually diminish; the alæ nasi no longer dilate, the appearance of the face grows more natural, the cough moist, a subcrepitant râle replaces bronchial breathing and bronchophony, which in its turn yields to a coarse crepitus, and finally, to the normal vesicular murmur, while the dulness on percussion also departs with the establishment of these signs of cure.

There is sometimes an imperfect sort of recovery, which, however, comes before a fatal issue. The more alarming symptoms lose some of their intensity, but the pulse retains its frequency, the face is pale, the respiration hurried, and the child wastes away; in other instances, again, all the symptoms grow in intensity until death closes the scene, but in both cases auscultation gives us evidence of extended hepatization of one or both lungs. The mode of death is by asphyxia.

Accustomed as we are to the striking and well pronounced symptoms of pneumonia in the adult—the abrupt commencement of the disorder, the peculiar ache in the side, the characteristic rust-colored expectoration, and the results of auscultation—considering these, it seems at first sight as if there could be no difficulty in the diagnosis of the same complaint in the child. Yet, though, as a general rule, this malady with due care may be easily recognised, there are very many cases in which it is liable either to be overlooked entirely or to be mistaken for some other disorder. For example, ephemeral fever, scarlatina, typhoid fever, and some cerebral affections, possess the same elevation of the temperature of the skin, the same hurry of the respiration, the same febrile movements, and frequently even the same short cough, that are found in pneumonia; and as in the early stage of the latter the auscultatory signs may be readily misunderstood, and the characteristic sputum throughout its course in children is absent, it is easy to perceive that the true nature of the case may be for some time a matter of doubt. It is not until the auscultatory phenomena are clearly and positively established that our hesitation is removed.

Pneumonia may be distinguished from bronchitis by the greater amount of fever, the intensity of all the symptoms, the dulness on percussion, the subcrepitant râles, bronchial breathing, and bronchophony. Subcrepitant râle, you will remember, is heard also in capillary bronchitis, but in that disease the walls of the chest are resonant; when dulness in its course appears anywhere I believe that it is due to the extension of the inflammation to the substance of the lung, producing partial or general pneumonia. Simple bronchitis, with its sonorous râle and coarse crepitus, cannot mislead you, particularly as the normal clearness on percussion is unimpaired.

Pleurisy is marked by much more severe pain than is to be found in pneumonia, and is oftener associated with cerebral disturbance. Children at the breast manifest the access of inflammation of the pleura by violent and continued screaming; whereas a child seized with inflammation of the lungs is sad and depressed, and restless, but does not cry much unless its comfort be interfered with. In both there is dulness on percussion; but in one there may be a friction-sound, and certainly is no subcrepitant râle, while in the other there is no friction-sound but the characteristic crepitus. Dr. West thinks that "it may be laid down as a rule, subject to but few exceptions, that whenever a child is suddenly seized with symptoms which, while they indicate some affection of the lungs, are yet unattended with the auscultatory signs of pneumonia, the disease from which it is suffering is pleurisy; and this probability is rendered almost a certainty if, while the child bears percussion on one side of the chest, it cries and struggles on the slightest attempt on percussion of the opposite side."

There may be cases in which it is impossible to mistake pneumonia at the apex of the lung for tubercles occupying that situation; for if a child be presented to us, of whose history we can learn nothing, with a hot skin, marked fever, and bronchial respiration under one or both clavicles, we are exceedingly likely to think that these symptoms result from the infiltration of tubercular matter. Pneumonia of the summit of the lung, however, is rare, and by waiting until the acute symptoms have subsided, the stethoscope will reveal to us the true cause of the bronchial respiration.

We may form our prognosis of the issue of a case of pneumonia by a consideration of the following conditions:—The original health and age of the child with its social position; the seat and the simplicity or complication of the inflammation. The younger the patient the poorer is his chance, especially if he is born in circumstances which exercise a depressing influence upon his constitution. Pneumonia is the scourge of foundling hospitals, to such an extent, indeed, that of 128 cases observed in the Foundling Hospital at Paris, 127 died.

Pneumonia confined to one side of the chest, and to the inferior lobe, which is not consecutive to any other complaint, and is judiciously treated, nearly always terminates in resolution; but coming on in very young children, or in those who are undergoing the process of dentition, cerebral complications are to be dreaded. Double pneumonia is always more dangerous than single, and inflammation of the lungs appearing in the course of other disorders—such for example, as hooping-cough or croup—is attended with extreme peril.

If we observe that the disease goes through its stages with regularity, that the fever is moderate and the hurry of respiration not extreme, that the face is not particularly sunken, anxious, or livid, that the auscultatory signs are distinct and follow their usual course, that there is no diarrhœa and no convulsions or other cerebral complications, we may confidently expect a return to health. But this opinion must be reversed, if the pulse grows small and rapid, the respiration extremely quick and panting, the irritability and restlessness marked, the chest sounds obscure, particularly if these symptoms are combined with a persistent diarrhœa, feebleness, emaciation, and convulsions.

Pneumonia in the adult has been the battle-ground on which the advocates of the lowering and supporting plans of treating inflammation have met and charged each other. As the disease is precisely the same in the child, all the arguments which have been urged in this famous controversy are equally applicable to it when it occurs in early life; but you will find that the old plan of bleeding and of giving tartar emetic is still proposed by many of the best writers on the diseases of children. My own experience leads me to trust to the opposite manner of meeting this malady; and, therefore, I should recommend you, when you see that your patient is about to have a severe struggle for his life, not to prepare him for the contest by taking away his natural powers, and reducing his already feeble strength as much as you can. Pneumonia is frequently terribly asthenic in its type, and at all events in young children, whose vital powers are very feeble, tends to produce a profound exhaustion.

Your object, then, will be to keep your patient alive, if you can, while nature carries the thoracic trouble through its regular steps to a proper termination. This you cannot effect by leeching, bleeding, or other antiphlogistic measures, as they are called; but you will be more successful by securing rest, avoiding lowering remedies, acting on the skin and bowels, and at the proper moment, supplying wine and nutritious diet. Warm baths are a remedy whose usefulness does not appear to be justly appreciated, and you will discover that their frequent employment will afford a child a degree of ease and comfort which will sometimes astonish you; their favorable action on the skin may also be aided by the administration of some mild diaphoretic, such as the liquor ammoniæ acetatis. Mild laxatives are also now and then advisable in order to keep the bowels clear, but unless there be obstinate constipation all purging is to be dispensed with. An occasional emetic will help in producing diaphoresis, will clear out the stomach of irritating substances, and will clear the bronchial tubes of tough and viscid mucus, while small doses of Dover's power will exercise a calming and soothing effect. Counter-irritation to the chest by means of some stimulating lotion, or of turpentine, together with the oil-skin jacket, will complete your list of medical appliances.

Close watching of the pulse will inform you at what period stimulants are necessary; but let me caution you not to be afraid of doing harm by giving too much—in many cases their good effect has been lost by sheer timidity. When the pulse begins to gain in frequency and lose in force, employ them instantly, and give them in such doses that their effect upon the auscultation may be manifest.

In treating bronchitis and pneumonia in children, remember the true nature of the disease, and proceed not upon empirical, but physiological and therapeutical principles. Bear in mind that there is no specific against inflammation—that human science has as yet discovered no agent by which its access can be prevented, or its progress checked—but that observation of its progress and termination points out to us ways in which it may be guided to a favorable result. The true physician, and the successful physician, is he who, studying the operations of nature, and humbly learning from her wise procedures, endeavors to aid in bringing about the result that she would accomplish.

Original Communications.

SARRACENIA PURPUREA (*Pitcher Plant*), IN THE TREATMENT OF VARIOLA—WITH CASES AND REMARKS.

By A. W. McDOWELL, M.D.,

A. A. SURGEON U.S.A. OF U.S. GENERAL HOSPITAL AT TRENTON, MISSOURI.

There have been forty-three cases of small-pox treated in the hospital at Trenton, and of these four died. In the general treatment they were regarded as asthenic cases. Stimulants were prescribed freely, and they were allowed to drink lager beer *ad libitum*. It is very refreshing to these patients, and where they used it with a *relish* they universally did well. I also allowed whiskey, in the form of milk-punch, but I preferred the beer. The diet was eggs and milk; of the latter article I think most favorably. The purely medical part of the treatment to which I wish especially to draw attention, was in the use of the sarracenia purpurea. It was prepared according to the following formula:—I used the leaves as I could not obtain the root. An ounce and a half to a quart of boiling water was boiled down to a pint and a half. Of this a wineglassful every six hours was taken.

The first case in which we used this remedy in hospital was a marked one. The patient was *unprotected* by vaccination. For several months he had been a nurse in the hospital. He was taken with violent symptoms; acute pain in the chest, and great difficulty of breathing, excited pulse, together with symptoms of severe pleuritis. The next day the eruption of variola showed itself. We considered this a very favorable case to test the powers of the sarracenia, but our prejudices were against its use. I exhibited the medicine. It soon showed its virtues. The eruption came out favorably; but instead of proceeding to suppuration, as usual, it began to *dry up;* the swelling of the parts was much diminished, because there was much less irritation from the eruption; the secondary fever that followed was *less;* the symptoms were *all* mitigated; and in a short time, instead of scabbing, with fever and great irritation of the system, the scales fell off like bran. An old nurse who had taken charge of several former patients, to whom the sarracenia *had not* been exhibited, remarked: "Doctor, what is the matter with this man? he acts altogether different from the other small-pox patients; he is all *scaling* off, and every time I make his bed I take out about two handfuls of scales, like bran." He stated the case correctly. The medicine was regarded as perfectly successful. The case was closely observed by all the medical attendants, and all were delighted. The triumph of the medicine seemed complete.

Again: will it prevent pitting, and do away with those ugly scars? Let it speak for itself. Two females were ordered into the hospital by the Port Commander. One had been sick two weeks. I gave her *no* sarracenia. The other was in the second day of the eruption, and had never been vaccinated. I exhibited the sarracenia. It produced its usual effects. These females were sisters. The one who took *no* sarracenia was much disfigured, and strongly marked with deep pittings; the other's face scaled off; it was smooth, not pitted, and the vestiges of variola will soon disappear. In the one the local effects were *permanent*, in the other *transitory*. The difference was *marked.* We must therefore regard it as able to prevent disfigurement. It *more* than answered my expectations.

Let me briefly contrast the cases treated without sarracenia with those treated with sarracenia. In the former cases there was great swelling, much irritation, and extensive suppuration, with prolonged suffering. The limbs were œdematous, so that I was frequently obliged to cut away the under clothing, and the puffiness of the face and hands was distinctly marked. In the latter cases there was no suppuration, consequently no sticking fast of the under garments, *no* œdema, as the suppuration was prevented; the irritative fever was much less; the long tedious stage of scabbing was passed over, and a bran-like scaling took its place. With such a contrast, we can but conclude that sarracenia is a most valuable addition to our Materia Medica—a medicine sent by a kind Providence to alleviate and mitigate much suffering, and to prevent the disfigurement following a most loathsome disease.

There have been four deaths from small-pox in this hospital. Of these, two men left the camp on a drunken spree; fearing to return, they took up their quarters in a deserted shanty where a female had died with confluent small-pox. They used her bed as she had left it, with clothes unchanged. They remained drunk two days. They were unvaccinated, and had variola maligna. One from the commencement passed bloody stools; neither would take stimulants, and both rapidly sank. I will recapitulate. Of forty-three cases of variola treated in this hospital, in thirty-six cases the sarracenia was exhibited; there were four deaths. I have made a fair and impartial statement of facts, and think the conclusion is inevitable—that sarracenia purpurea is a most useful medicine in variola.

General Hospital, Trenton, Mo., Aug. 25, 1863.

The British Medical Association.—The annual meeting of this Association was held last week at Bristol, under the Presidency of Dr. Symonds. The Addresses were delivered as follows:—Medicine, Dr. W. Budd; Surgery, Mr. Augustin Prichard; Midwifery, Dr. Swayne; Chemistry, Dr. Bird Herapath. The President delivered an eloquent address, papers were read on various subjects, and the meeting terminated with a public dinner. The practitioners of Bristol received their visitors with general and liberal hospitality.—*Lancet.*

DIATHESIS.

By DR. ANDERSON,

OF ILLINOIS.

[Being a Paper read at the last Meeting of the American Medical Association held at Chicago.]

The term diathesis is used to express any general constitutional condition which exerts modifying influences upon the course of disease.

These conditions produce very powerful and controlling effects upon the results of surgical injuries and operations, and to one of them alone, viz. the aplastic diathesis, ten per cent. of the deaths in surgical cases are due. This mortality is capable of being entirely prevented by means now within our knowledge and control. Yet the subject is difficult, and, being incapable of the attractions of pictorial illustration, is liable to be overlooked by superficial observers.

A great variety of diatheses exist, each having its own peculiar character; but the two which have the most important surgical relations, are the *aplastic* and the *hyperplastic.*

The *aplastic diathesis* is that condition of the system in which there is an excessive tendency to a dissolved condition of all protein compounds, the blood-corpuscles breaking down, the solid tissues readily ulcerating, and all the products of inflammation taking a liquid form, being either degenerated blood, serum, or pus. At the same time, there is a more or less striking absence of the power of depositing plastic lymph around inflamed points. It is in this diathesis alone that the patient becomes capable of those fatal aplastic diseases—traumatic erysipelas, diffusive phlebitis, pyæmia, and hospital gangrene. The deaths from these causes, amounting to ten per cent. of all mortality after surgical operations, may all be prevented.

The causes of the aplastic diathesis probably operate by inducing an excessively alkaline condition of the system. Alkalies are the natural solvents which in the human body maintain the liquid form of certain protein compounds, such as fibrin, albumen, caseine, etc., whether found in the blood, pus, or serum. It is probable, therefore, that an excess of these alkalies would have the effect to keep these compounds in the liquid form to an excessive extent. All the products of aplastic inflammation and effusion, whether blood, serum, or pus, are alkaline. Besides, the effluviæ of decomposing animal secretions, which are the most powerful external causes of aplasticity, are all saturated with alkaline gases of the ammoniacal series.

As was just remarked, the most powerful external cause of the aplastic diathesis is the exposure of the patient to the depressing alkaline effluviæ from decomposing pus, urine, or other animal products.

I saw this repeatedly exemplified during my service in the army. The crowding of too many wounded men into hospitals always produced within three days the evidences of aplasticity. Of two hospital steamers, after a battle near Vicksburg, where one was overcrowded and the other was not, the mortality on board the one not crowded was five per cent., and on the other, thirteen and a half per cent., the excess being due to erysipelas, pyæmia, and secondary hæmorrhages. So striking are these results that it is easy by the sixth day to distinguish the men who have lain in an overcrowded ward, simply by the appearance of the wounds. A thousand men of this sort, mixed with a thousand others who have been kept in perfectly pure air, could readily be separated by inspection of the wounds alone.

The effect of the aplastic diathesis is to prevent all that effusion of plastic lymph necessary to the repair of injured tissues, and to drain away the nutritive material of the blood in an excessive flow of pus or serum, thus exhausting the patient. In this diathesis incised wounds do not readily unite by first intention; lacerated wounds do not granulate freely; ulcerations become phagedænic; injured vessels reopen after ligature, and sound ones give way to ulceration, producing secondary hæmorrhage; and most important of all, the irritant animal poison found in erysipelas and hospital gangrene, when formed or received in any part of the body, spreads and produces rapidly fatal results, because its action is not limited by any barrier of plastic lymph.

The relation of this important poison to the aplastic diathesis is as follows:—The poison may be innoculated into a plastic constitution, but it will not there produce either erysipelas or hospital gangrene. The irritated spot is immediately surrounded by plastic lymph, a local abscess ensues, and the poison is expelled with the pus. A plastic constitution cannot have erysipelas; but an aplastic one is liable to all the mischiefs resulting from diffusion of the poison in a liquid form through all parts of the body. I suppose that the suppurative inflammation of the internal coats of the veins results from the poisonous lymph taken up by the lymphatics at the affected part being carried into the venous current. Hence pyæmia.

The aplastic diathesis may exist without the poison, and the poison may be present without the diathesis; but when both are present, a fatal result is to be feared. Both the aplastic diathesis and the existence of the erysipelatous poison may be epidemic. The presence of these conditions produces a malignant character in the prevailing distemper. At such times malignant scarlet fever, hospital gangrene, puerperal peritonitis, confluent small-pox, and all other malignant local inflammations, are found to contain the erysipelatous poison, and are capable by innoculation or contagion of propagating erysipelas in aplastic, and abscesses in plastic constitutions.

The aplastic diathesis can be diagnosed in advance of a surgical operation, so as to enable the practitioner to guard against its effects. This may be done by carefully studying the condition of any abrasions, pimples, scratches, etc., some of which may be found upon the skin of almost every patient, or at any rate may be made in important cases for the purpose of diagnosis. They show the effects of the diathesis in the same manner as larger injuries.

The treatment of the aplastic diathesis consists—1st. In securing a perfectly fresh and pure air for respiration; 2d, the administration of such remedies internally and externally as will neutralize the alkalies. Such are the tincture of iron, iodine, chloride of zinc, sulphate of iron, bromines, sulphuric, muriatic, and nitric acids, etc. Chlorine, iodine, and bromine, not only neutralize alkalies, but destroy animal poisons. Practically, I use mur. tinct. of iron in doses of twenty drops internally every one or two hours, and tincture of iodine with glycerine kept constantly upon any local manifestation of the poison.

By the free use of the tincture of iron the diathesis may be changed from aplastic to plastic in thirty hours, and a marked improvement be manifested in the parts affected. For the past five years I have made a constant practice of giving muriated tinct. of iron as a prophylactic after surgical operations, always commencing its administration in a few hours without waiting for any actual manifestation of aplastic diseases. Since I have commenced this precaution, no patient of mine has ever died of traumatic erysipelas, phlebitis, or pyæmia, and yet I have operated in a vast number of cases, and ought, under the ordinary management, to have lost a number of patients by these complications. Erysipelas under this prophylactic treatment sometimes makes an effort to commence, but is readily conquered without dangerous results. I now feel perfectly safe in this respect, *and have ceased to reckon erysipelas, phlebitis, or pyæmia, among the risks of my operations,* if I have control of the patient.

The *normal diathesis* is that where neither plasticity nor aplasticity is in excess, but where the medium happily prevails.

The *hyperplastic diathesis* is the opposite extreme from the aplastic. It is probably caused, as claimed by Fuller in his work on rheumatism, by the excess of acids in the system. It is marked by an excessive tendency to solid deposits in inflammation. Suppuration is difficult, and when it occurs, is surrounded by a hard plastic tumor. Wounds unite readily by first intention, but contusions and sprains form hard swellings, which are slow to suppurate, slow to resolve, and often keep the patient lamed for a year after the injury. Erysipelas, diffuse phlebitis, and pyæmia, are impossible, unless this diathesis is first overcome; but the innoculation of the erysipelatous poison results only in the formation of local inflamed tumors, which occasionally suppurate and discharge from the summit of a hard, well-defined swelling. Very painful felons occasionally result if the poison is applied to the hands.

The signs of this diathesis are:—1st. Any symptoms of genuine rheumatic tendencies—rheumatism being the typical disease of the hyperplastic diathesis as much as erysipelas is of the aplastic. 2d. Rapid drying up of scratches, abrasions, pimples, etc., upon the skin, without any tendency to suppuration. 3d. Absence of all disposition to pustular eruptions, the skin being clear, and often a little coarse, dry, and firm in its appearance. If there are any eruptions, they are apt to be of the scaly varieties, showing a tendency to excessive development of the cuticle.

I pass over the consideration of the cancerous, tuberculous, and syphilitic cachexies, for want of time at the present, designing to return to the topic at a future meeting.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, May 20, 1863.

DR. JAMES ANDERSON, PRESIDENT, IN THE CHAIR.

DISCUSSION ON HOSPITAL GANGRENE.

DR. PARKER opened the discussion by remarking as follows:—

Mr. President and Gentlemen of the Academy:—The subject of hospital gangrene is one that has attracted a great deal of attention of late among us, especially since the commencement of the present war. Before that, hospital gangrene was but rarely met with, except now and then in our large hospitals. I have not had the opportunity of encountering the disease to any great extent but once, and that was only since the war commenced; hence my experience must be necessarily limited.

Hospital gangrene is so called, I suppose, because it has been met with almost exclusively in hospitals. I have met with but one case in private practice, and that case happened to have been brought from a hospital.

Very little has been written of this disease until within the past few years. Celsus, Avicenna, and Ambrose Paré hardly refer to it, yet we have do doubt that it existed then as now, inasmuch as there were present the same circumstances to produce it. We find the disease particularly spoken of in 1322, as being exceedingly rife in Paris, at the Hotel Dieu. At that time it was very destructive. We again find it spoken of in 1780, by Puto. He was then interne at the hospital at Lyons. He spoke of the disease as we meet with it in wards, and indeed went so far as to question the utility of hospitals altogether, inasmuch as he stated that eleven-twelfths of all those attacked with the disease perished. We find, also, when it existed in Paris, that it was very destructive. It is stated that of twenty-two cases of amputation performed there, every stump was attacked, showing the contagious character of the disease.

From 1783 up to 1814 we have various accounts of this disease, but no full history of its characters until after the Peninsular war. At that time the French and English surgeons saw a great deal of this disease. Before that time the generally prevailing opinion was that the disease was constitutional in character, but since then the opposite opinion has more generally prevailed.

The next point I wish to refer to is simply this, the difference between hospital gangrene and common gangrene. There is a difference, and a very great one! I am prepared to say that hospital gangrene is a disease in fact, as distinct from common gangrene as is a fracture from a dislocation. We understand by common gangrene, merely the death of a part either as the result of violent inflammation, the result of strangulation or violent injury, of excess or diminution of caloric, of infiltration and, in fact, in a great variety of ways. Common gangrene occurs only in individuals whose systems are more or less broken down, but we find that this is not the case with hospital gangrene; hospital gangrene may occur in the strongest constitutions.

Hospital gangrene seems to depend upon a specific poison, for we always find it presenting the same physiognomy. We may from this observe *a posteriori* that the cause is all the same. Now, what is the cause of hospital gangrene? I have said that it is met with only in hospitals. I believe that the same causes operate to produce hospital gangrene which are necessary for the development of typhus or typhoid fevers, but with this addition, the presence of suppurating wounds! Superadded to the effects of bad ventilation we have, also, the results of the decomposition of pus and other discharges from wounds.

How does this cause operate? I know that some assume, on the one hand, that it operates locally; and still others, that it operates through the constitution. We all know that small-pox may be developed either through vaccination or by direct exposure to contagion; and I believe that very much the same thing is true with reference to hospital gangrene. We may have in some cases the local symptoms showing themselves first, and then subsequently the constitutional symptoms, and *vice versâ*. Dr. Ball, who has written an Inaugural Thesis on Hospital Gangrene, the result of observation during the summer months while engaged in the hospital in charge of Dr. Weir, in Frederick, enumerates forty-three cases, in five of which he states that the constitutional symptoms were the first ones that showed themselves. Hospital gangrene may be propagated in a variety of ways, by the promiscuous use of sponges, basins, and the like, and, in a word, where the disease is prevailing.

According to the assertions of Mr. Blackadder, a surgeon of eminence in the Peninsular war, hospital gangrene cannot be propagated by actual contact, unless there be an abrasion of the skin. But after all, there is a great deal of discrepancy in reference to the fact of local causation among different observers. A French surgeon, by the name of Olivier, with a view to a settlement of this point, determined to experiment by inoculating his own person. He inoculated himself after the manner of vaccination, and found that a distinct vesicle appeared on the second or third day, and that on the fifth day a slough had formed. At this point, however, he arrested its progress by cauterization.

There are numerous instances to prove that the contagion may operate through the atmosphere. There were some beautiful cases illustrating this point in the hospital at Frederick, where a large number of patients were attacked with gangrene and placed in tents, in such a situation that the hospital was to the windward. So long as the wind was away from the hospital they were free from contagion, but when the wind changed, a considerable number of cases were attacked. Again, a door was opened communicating with a ward containing gangrene; the patients nearest to the said door in the other ward were attacked by the disease.

Now, with reference to the symptoms, they may be divided into constitutional and local. The constitutional symptoms consist, in the first place, in a general upset of the nervous system; the patient is restless, the pulse is small and snappish, the appetite is very frequently lost; there may be vomiting and also diarrhœa, coupled with typhoid symptoms. Locally, the character of the ulcer is very peculiar: it may be either dry or moist; its base is covered with a grey slough, and its edges are everted, giving it very much the look of a large chancre; sometimes it is covered by a diphtheritic-looking membrane. Sometimes the edges of the ulcer are undermined, and the muscles are dissected out; sometimes the ulceration would travel off in a circular form from the main ulceration. The pain which invariably accompanies it is also very peculiar; it is generally spoken of by the patients as being "sharp, burning, and tingling." In reference to the diagnosis of this disease there can be no difficulty after the ulcer has been once seen.

I saw a large number of cases last summer at the New York Hospital, and afterwards at Bellevue, and with the assistance of my friend Dr. Peck, I made trial of almost everything claimed to be useful in the treatment of the disease, and we came to the conclusion that what is called there the disinfecting powder, composed of percarb. of iron, pulv. cinchona, and opium, was the most grateful application, while constitutionally there was nothing to equal the scattering of patients, the plentiful supply of *fresh air*, a *clean skin*, and *generous diet.* Dr. Ball states that Dr. Weir was very successful in his treatment of the cases, but what did he do? He put them out in tents where they had plenty of fresh air! Dr. Ball also lays a good deal of stress on the good effects of nitric acid locally applied, and I find that the average number of applications for each patient was eight. What does this cautery do? It merely destroys the sensitive skin, and by so doing alleviates irritation. Now the cauterization, so far, is well enough, but while you are doing all this the time occupied is sufficient for the patient to do either one of the two things, to die or to get well, and he will be apt to do either one or the other according as you give him or keep him from a *good substantial supply of fresh air!*

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NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, March 25, 1863.

DR. H. B. SANDS, VICE-PRESIDENT, IN THE CHAIR.

MUMMIFIED HEADS.

Dr. Merritt presented a photographic view of the mummified heads which had already been exhibited to the Society, and made some additional remarks upon the specimens. He was of the opinion that they were the heads of warriors who had fallen in battle, as in the temporal region of each there was a wound which looked as if made by a spear. He thought it also probable that the heads, after having been deprived of their bony textures, were stuffed by some elastic material during the process of preparation, in order that the natural conformity of the parts might be maintained. It was also evident to him that these heads had been preserved as trophies, and afterwards been buried with the victors.

CYST FROM ANTERIOR CERVICAL REGION, CONTAINING PUS AND HAIR.

Dr. Post presented a small cyst, removed from the submaxillary region of the neck of a lady a few weeks before. It was interesting in reference to its contents, which were made up entirely of pus and hair.

A second specimen consisted of fragments of a urinary calculus removed by the lateral operation for lithotomy. The point of interest consisted in the age of the patient, which was but two years and three months. The weight of the fragments was 111 grains.

Dr. Clark exhibited on behalf of Dr. Johnson a rupture of the aorta. The rent was transverse, running two-thirds of the way around the vessel, extending through the middle and a greater part of the middle coat, and leaving the outer coat entire with some fibres of elastic coat tissue attached to it. It then did not go downwards as ruptures of this sort frequently do, but at a point below the reflexion of the pericardium found its way through the outer coat, consequently opening into the pericardial sac. At one part of the base of the aorta upon the outside was quite a large clot, which was the result of infiltration of blood into the areolar tissue in that vicinity. The aorta was atheromatous in patches.

The following history, furnished by Dr. Johnson, was next read:—

"Catherine Holland, æt. 70, native of Ireland, a pauper, was admitted to the receiving ward, March 7th, 1863, at half past ten A.M. Her symptoms upon admittance were weakness, with nausea and vomiting. She continued in about this condition till about half past four P.M., when she complained of pain in the præcordial region, and was seized with convulsions, and died immediately. She had previously been under the care of my colleague, Dr. Roof, and was discharged March 2d, improved, her symptoms having been those of dyspepsia. On the morning of March 7th, while at the Almshouse and before being tranferred, she fell down in a kind of fit, I should judge, as near as I can learn, while going to breakfast. This is all that I have been able to ascertain relative to the case.

"Upon *post-mortem* examination, the ascending portion of the arch of the aorta was found to be ruptured, and the pericardium filled with coagulated blood, the lower part of the rupture being about half an inch above the valves, the rupture being in the form of an obtuse angle, and about two inches in length. The aorta itself was to all appearance healthy. There were a few old pleuritic adhesions of the lungs to the walls of the chest, the lungs themselves being healthy. There was fatty degeneration of the liver to a considerable extent. The kidneys were small and contracted, and presented marked evidences of Bright's disease. There were also a few cysts found in each kidney, and in the external surface. The spleen was of normal size and condition. The brain was also healthy."

CANCER OF THE LUNGS.

Dr. Clark, in the absence of Dr. Wood, presented a specimen of cancer of the lung for that gentleman, and remarked upon it as follows:—

I will exhibit the lung, and give only so much of the history as will be necessary to understand the rest, and leave the fuller history for Dr. Wood at another meeting. It is to my observation a new form of secondary cancer of the lung. The form that it assumes upon the pleura is not new; there it is in patches, and at certain points has considerable prominence. The largest of these scales equal in size the little finger-nail, while the smaller are mere points, there being a great many variations in size between these two limits. They did not seem to have excited any pleuritic inflammation, but remained as mere appendages to that membrane. This same material found upon the pleura is scattered through the lung, and wherever it existed in greatest quantity there was an induration of the lung tissue analogous to that which occurs in chronic pneumonia; that is to say, an increase in its fibrous tissue, and consequent diminution in the size of its air-cells. The lady died of apnœa, and during her life, having seen her two or three times, I was left in doubt whether the disease in her lungs was tuberculous or cancerous. I could find no considerable accumulation of cancer anywhere. Her great difficulty was in getting her breath.

The *post-mortem* examination revealed that the lung in a great many portions was not expansible in consequence of these hard masses, which were lost by a sort of diffusion into the surrounding tissue. The particular form of cancer, and the details of the appearances of the lung, I will leave until Dr. Wood gives the history.

MULTILOCULAR OVARIAN CYST.

Dr. Finnell presented a multilocular ovarian cyst, removed from a woman aged seventy, who died a few days before at St. Vincent's Hospital. According to her statement, the tumor was only fourteen months in growing. She was tapped twice, at short intervals, but the fluid at each time rapidly accumulated, and she gradually sank and died.

At *post-mortem* examination, the tumor was found to weigh thirty pounds. There were a few slight adhesions over its anterior surface, and, what was quite remarkable, the pedicle was only equal in thickness to the middle finger.

FOREIGN CORRESPONDENCE.

LETTER XLIII.

By PROF. CHARLES A. LEE.

MANTUA, Nov. 29, 1862.

MILITARY HOSPITAL AT VERONA; AUSTRIAN BARRACKS AND COOKING ARRANGEMENTS; RATIONS AND MONEY ALLOWANCE TO AUSTRIAN SOLDIERS; DRY AND COMPRESSED VEGETABLES FOR ARMY USES; TOPOGRAPHY OF MANTUA, ETC.

As it does not enter into the plan of these letters to describe cities, towns, antiquities, curiosities, architecture, paintings, or statuary, I pass them mostly by as usual, and confine myself mainly to those topics which more immediately interest the medical observer. Otherwise, I should be strongly tempted to give some account of the old cities, Vicenza, Verona, Mantua, etc., and especially their immense and extended fortifications, many of them recently erected by the Austrians, which seem absolutely impregnable, and in the construction of which military art has exhausted all its known resources. Sufficient details, however, in regard to these matters, may be found in several recent works of travels, and I therefore shall, as heretofore, confine myself chiefly to medical topics.

I saw nothing in a medical way worth special mention in old Vicenza, famed for Palladian architecture; but in Verona there is a new military hospital, lately built, deserving particular notice. It occupies an elevated site on the banks of the Adige, near the walls, and has accommodations for about 1500 beds. The building is quadrangular in form, two stories, with corridors and basement. The transverse wards are calculated for twenty patients each, with one large window in the centre opening on the exterior, and a door directly opposite on the corridor. Over this door is a large window extending nearly to the ceiling. Thus, the windows and doors being open, the direct draught is through the middle of the ward, and not over the patients, while beds are arranged on each side, with their heads towards the walls. At night, a gaslight in the corridor, and close to the window over the door, suffices to light the ward, as well as the corridor, and no other light is admitted into the room, except by special order. The rooms are all arched with brick, plastered on the solid wall, and warmed by an iron stove in the middle, but at one side of the ward. The wards and corridors have wooden floors, except the basement, where they are of stone in parts that do not communicate with wards, where they are of wood. There is a water-closet, about four feet square, in the corner of each ward, the stool or water-pan being placed in a recess in the thickness of the masonry of the corridor partition. A low and small door in the corridor communicates from this recess, so that when the patient has left the closet, and closed the door into the ward, a servant from without can at once remove the stool, thus avoiding offensive effluvia in the ward, as well as exposure and risk in leaving the room for one, perhaps, of a different temperature. Besides the means of ventilation already mentioned, there is under the windows, opening on the exterior, a smaller one of two feet square near the floor, to admit fresh air at the lowest part of the room, and a similar opening of twelve inches square next to the ceiling over the door, to allow the escape of warm and foul air as it ascends. The latter is closed by a valve movable at pleasure; the one under the window is closed by a solid shutter.

The bathing-rooms are fitted up on a very extensive scale, and are supplied with hot and cold water-baths, steam-baths, douche, etc. For steam-bathing, a large room is fitted with rows of bedsteads, one rising above the other in steps, like an amphitheatre, with sloping head-board for the comfort of the patient, who is laid in his blanket on one of these wooden platforms or bedsteads, and steamed by the admission of any degree and quantity of steam from the boiler in an adjacent apartment. In the adjoining room are small apartments or stalls, of sizes suited for patients standing, sitting, or reclining, fitted with pipes and faucets, admitting a shower-bath from above, or horizontal jets from the sides, or a perpendicular jet falling quietly on the patient, thus furnishing ample facilities for every kind of local or general bath.

Two other large apartments are fitted up with thirty-six large marble bathing-tubs, with tubes and valves for hot and cold water. These tubs are sunk several inches in the floor, the top remaining about one foot above, making it easy of entrance by the invalid, and at the same time convenient to put a patient in the bath who may require assistance.

In another apartment is a large boiler, set in masonry, for steam and hot water for the bathing-rooms; and connected with this is a room containing a reservoir or cistern, rising nearly to the ceiling, supplying a head of cold water for the bathing-rooms, steam-boilers, etc. This reservoir is supplied with water pumped by manual labor from the river Adige. All the bathing-establishment, the store-rooms, apothecary's department, and kitchens, are on the basement floor, and elevated about three feet above the court-yard.

The whole establishment is under the superintendence of a Major of Artillery, the surgeons having none but their professional duties to perform. The daily dietary of each patient is written on a board at the head of his bed. In the routine of serving rations, etc., nothing different from usual custom was observed, except that every bed was provided with a board about fourteen inches wide and twenty inches long, with edges rising about a quarter of an inch above the surface, answering as a table or waiter, on which to place his food, tumbler, fork, spoon, &c. There are special wards for cutaneous, infectious, and contagious diseases, as well as the insane, which are under lock and key, and guarded by sentinels. In the insane ward the stove is in one corner of the room, and protected by an iron grating, so as to be inaccessible. The amputation table is similar to what is sometimes seen in our own hospitals, consisting of an iron frame as a bedstead, in three equal divisions, connected by hinges, allowing the head or foot part being raised or lowered at pleasure to any inclination from sitting to lying horizontally. The centre part is fixed to an iron elevating screw, so as to be raised or lowered to any required height, while the whole revolves on its centre or vertical pin, the head and foot framepieces, as already stated, being fixed at any angle at the will of the operator.

The dead-house is of stone, arched with brick, with tile roof. On the right of the entrance is a guard-room, where some one is in attendance night and day. An adjoining apartment of the same size is for autopsic examinations. Behind these two, and extending the whole length of the building, is the apartment for the dead, with a window at each end. The bodies are laid on inclined planes, side by side; to the hand or foot of each one is attached a bell-pull, communicating with a bell in the guard-room, occupied by a guard of four soldiers, so that prompt aid may be rendered in cases of resuscitation. But I could not ascertain that any such cases had ever happened. The floors, tubs, etc., of this building, are of polished marble.

The civil hospitals at Verona are far inferior in all their arrangements to the military, and present nothing worthy of special remark—soups and potages constitute the principal diet of the patients.

At Mantua, I also found a very strong force of Austrian troops, with hospital and barrack arrangements perhaps inferior to those at Verona, but still well planned and comfortable. In general, the Austrian barracks for infantry may be pronounced superior to any in Europe, and many of them are not of very recent date. For the most part the buildings are of quadrangular shape, surrounding an interior court. They are usually of brick, two stories, with arched ceilings, paved corridors, stone staircases, and wooden floor to the rooms. The bedsteads are of iron, of simple construction, and when taken apart fold up flat, requiring little room either for storage or transportation. The rooms are generally calculated for twenty or more men. They are warmed by iron stoves within each apartment, and every man is provided with an iron bedstead and bedding arranged on each side of the rooms, head to the wall, with an interval of eighteen inches between every two. The cooking is all done in apartments on the respective stories of the companies. The cooking arrangements in the Austrian army are somewhat various, but generally consist of a single camp-kettle for every squad of twelve to fourteen men each. In some places I found them divided in messes of thirteen, and as a general rule in all the garrisons, the men eat in their dormitories. The mess-can is designed to answer the two purposes of garrison and field service, but boiling is the only culinary process employed. For purposes of economy of fuel and rapidity in cooking, the tin cooking-vessel or boiler is surrounded by the fire; and this is effected by its being shaped like the frustrum of a cone, resting on three legs of six inches in length, while another cone, serving as the furnace or fire-place, passes through the bottom, and up through the cover, its bottom being supplied with a movable iron grating, on which a charcoal fire is made; after the food is cooked, the grating on which the fire rests is withdrawn, the coal falls down, leaving the mess-can to be taken to the mess-table in the dormitory, or the squad wherever assembled. In garrison the mess-kitchens are arranged to suit this apparatus, and are generally furnished with two masonry tables of fifteen feet long by three wide in the centre of the room, the cans being placed thereon in two rows close together, the fumes of the charcoal rising to the crown of an arch covering the two tables, from whence a chimney conducts them to the roof. When on field service, the cooking utensils are transported in the baggage-wagons, and of course are not at hand when the troops halt and most need it, so that the soldiers have no other than dry food in their haversacks during the day. In addition to the mess-kettle, every soldier, as in our own army, has a small tin can or dish, in which he receives his ration from the mess-kettle. In the military arsenal at Vienna I observed a different arrangement. Here a kitchen is provided for every 196 men, on the same floor as their quarters, and the mess-kettles of the different squads are placed on a metal tablet or table, some fourteen feet by three wide, heated by a furnace from beneath, the fire-places being at each end, and the chimney in the centre on the side. The arrangement, however, is a bad one, as the heat is not adequate to cook the food with sufficient rapidity.

In the Austrian garrisons throughout the Venetian Provinces the soldiers are supplied with bread at the rate of a pound and a half per day each, and a small daily allowance of money to purchase meat and vegetables or other articles as they may choose. This amounts to nearly four cents a day for infantry, five cents for grenadiers, and six for special corps! This is placed in the hands of the company commander, and is distributed by a sergeant to the corporals of the mess-squads, who, in company with two privates of the same, expend it for such articles as the squad directs. In the Austrian army there is a commissary for every brigade, who examines the accounts, countersigns them, and gives orders for money on the military chest, and this certified order goes into the chest as evidence of the withdrawal of such an amount of money and its application. Another wise precaution is used: the keys of the military chest are kept generally by three persons, all of whom must be present when the chest is opened, who must also know for what the money is taken out; nor can the chest be opened without the three keys in possession of the respective keepers.

Fresh bread and vegetables are furnished daily to the troops; an American is surprised at the small quantity of meat which furnishes soup, the principal food, to a squad of thirteen. Vegetables, as cabbages, beans, and turnips, etc., are extremely cheap all over the continent, especially in Germany, France, and Italy, and unless war is carried on at a distance, as, perhaps, during the winter season, dry or compressed vegetables are seldom if ever used. The French troops, however, make considerable use of the latter, and the grand establishment of M. Cholet in Paris, furnishes an ample opportunity of seeing the different modes of preparation. For the most part, the vegetables are all cut into thin slices, then partially dried by artificial heat, and reduced to cakes of about one inch thick by powerful pressure with a hydraulic press, potatoes, cabbages, turnips, carrots, etc., all being mixed together. Sometimes the potatoes are cut into cubes, about one-fourth of an inch square, then dried, and preserved separately from other vegetables; all the others are cut into thin slices. During the Crimean war, as is well known, the French and English armies in the Crimea subsisted chiefly on these dried and compressed vegetables, concentrated milk, concentrated essence of beef, beef-soup, and granulated gluten. Forty thousand rations of these compressed vegetables, put up for transportation, occupy a space of only about three cubic feet, and weigh nearly 4000 lbs., including the packing cases. The whole are put up in tin canisters of about one cubic foot each. It is now well established that, if good articles are selected, and suitable care used in their preparation, they will not only keep perfectly fresh for a long time, but remain wholesome and palatable. Their advantages over ordinary rations, where celerity of movement is required, as in cavalry raids, etc., and where delay in collecting food by the way may defeat the object of the expedition, are sufficiently obvious.

Were not this letter already too long, I might dwell at some length on the topography and surroundings of this old city, the birth place of Virgil, and speak of its hospitals, schools, and prisons, etc. I may say briefly, that it is situated on the low, flat banks of the Mincio, surrounded by lakes and marshes, which add greatly to its strength, but still more to its insalubrity. The adjacent marshes were partially drained by the French when they held possession; but though the swellings of the Mincio are somewhat hemmed in by the artificial dams and embankments, still the place is noted for its unhealthiness, intermittents and remittents, often of a malignant type, being very common during the summer and autumnal months. The streets are kept clean, but the buildings are old and dilapidated; there are few signs of commercial activity, and it is evidently but the wreck of what it once was. Since its siege and capture by Napoleon in 1796, it retains few marks of its former splendor, though its huge, misshapen masses of buildings, immense piles casting deep shadows, feudal towers crowned with their forked battlements, castles, and Lombard arches, form a scene of peculiar and novel character; its long siege by the imperialists during the thirty years' war, when famine and pestilence raged within its walls, its subsequent storming and sack, when it was given up to plunder and violence for three days, form one of the most striking events in modern history.

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Illegal Practice in France.—At the Tribunal of Correctional Police, at Paris, the "Black Doctor," J. H. Vriès, was convicted on a charge of illegally practising medicine; "Dr." Ebra, who assisted Vriès, was also convicted of illegally vending medicines. Vriès was fined 2000 francs for illegal practice, and 500 francs for selling medicines. Elbra was fined 500 francs for selling only; the costs of the conviction to be divided between them.—*Lancet.*

University of Aberdeen.—Dr. John Struthers, F.R.C.S., Lecturer on Anatomy at Surgeons' Hall, Edinburgh, has been appointed to the Professorship of Anatomy in the University of Aberdeen, vacant by the resignation of Dr. A. Lizars. This appointment cannot fail to give general satisfaction to the profession. Dr. Struthers is a most accomplished anatomist.—*Lancet.*

American Medical Times.

SATURDAY, SEPTEMBER 5, 1863.

CAUSES OF MODERN CHANGES IN THE ART OF PRESCRIBING.

One of the most wide-spread of the popular errors created and fostered by the friends of homœopathy, is that which attributes to this pretentious system of quackery the comparatively diminished amount of medicine prescribed by regular physicians. And it far too frequently happens that medical men tacitly or openly acknowledge the truth of the assertion. Admitting the fact that less medicine in bulk is recently administered than formerly, they see no other explanation than that so often alleged which has now well-nigh passed into a proverb. The admission of this statement is utterly false, and damaging to our profession. Homœopathy is entitled to as little credit for the improvement of our therapeutics as for the advancement of pathological or surgical science. It is important that we should understand on what basis rests the actual changes in our present materia medica, that we may give a rational explanation, and not make improper concessions to quackery.

It should be understood that this new hypothesis was made at a peculiar period in the history of medicine, and one well adapted to give it popularity. About the time of its promulgation a great change had taken place in the science of chemistry, especially in that branch which we may term pharmaceutical chemistry. The alkaloids, the active medicinal principles of remedies, were just then discovered, and by this discovery a new impetus was given not only to chemistry but to therapeutics. The oft reiterated query of centuries—Can you not give your remedies in smaller bulk, and in a more agreeable form?—was about to be answered. It was apparent that the physician could give the same strength as formerly in a very much less, in fact in a minute dose, and there was hope that eventually all medicines would be thus reduced. Where the older practitioners gave opium or bark in large bulk, the younger therapeutist gave the small and elegant preparations of morphine or quinine. The homœopaths very early finding the utter inertness of the medicines they professed to give, surreptitiously administered these alkaloid principles, which could be given in minute doses, and produced marked results. A sect which had started upon a new hypothesis, presenting so many points of favor with the public, did not intend to lose these advantages by any concessions of the inability of their infinitesimals to produce marked and visible effects upon the systems of their patients. Where infinitesimals did not succeed, the alkaloids, most frequently administered by their own hands in full doses, produced certain and marked results, thus positively presenting to the public a falsehood as a visible truth of the soundness and truthfulness of these dogmas. This system of medication immediately gained favor with the delicate, the nervous, the fastidious. Many of the older practitioners who had become routinists did not attempt to investigate these causes of success, or use the new remedies which science had presented to them, but continued to administer the old and nauseous medicines, thus driving many of their best patients into the hands of the homœopaths. In those preparations which could be taken with but little taste, most persons believed that there was but little real medicine, and boasted to their former physicians of the minuteness of the dose which now affected them, little thinking that frequently in the small quantity was concealed treble the medicinal power which they previously took in large quantity. Thus the assertion of the homœopaths that they administered less medicine than the other physicians, and much less than was formerly given, was in fact a falsehood; for by calculating the amount of active principle given within a specified time, it was found to exceed the amount of the same principle contained in the crude material formerly used.

There can be no question that the innocent dupes of homœopathy are constantly dosed with powerful medicines, prostrating and debilitating their nervous system, and making them perpetual patients. This fact cannot but be acknowledged by all, for it is well known that scarcely an hour elapses without a dose of medicine is administered. In homœopathic families the habit of dosing becomes permanent, to the infinite injury of all the members, but especially to the young and susceptible. This practice tends to but one result, viz. constant minor ailments, which ultimately lead to prolonged medical attendance and large bills. It is a demonstrable fact that patients who have left their old medical attendants, and placed themselves under the care of homœopaths, have had much more sickness than before, and have more than quadrupled the amount of their bills.

The number of alkaloids and active principles that have been discovered, though numerous, do not present remedies for all cases. Therefore in some instances the whole medicinal substance or plant is still used by physicians. But this cannot be done by homœopaths, because they have promised the public minute and almost tasteless remedies. When, therefore, cases are presented to them that cannot be reached by these new remedies, the patient must and does suffer a longer and more dangerous sickness. If he recovers, his convalescence is tedious, with complications which might have been prevented by appropriate treatment at an early stage of the disease.

But with the numerous fallacies of the system of homœopathy we have nothing at present to do. It was our present purpose simply to answer the oft repeated assertion that homœopathy has taught regular physicians to use less medicine, and also to refute the error that homœopaths use less medicine than educated practitioners. Briefly, then, we gladly acknowledge and rejoice that all educated physicians use less medicine, and less nauseous medicine than formerly, but this result has been brought about by physiological investigations and pathological examinations. Theories have given place to facts, and improved methods of diagnosis have taught clearly what we have to cure. A better understanding of therapeutics has taught us the application of remedies to the cure of disease, and an improvement in chemistry has given us remedies of definite and certain power. A deeper and more profound study into the science of Medicine as a whole, has improved our knowledge in each of the various branches, and given to us a greater knowledge of the diagnosis, prognosis, and treatment of disease.

THE WEEK.

The profession of London have for some time been agitating the question of the retirement of old medical men from public institutions. So strongly does the current of opinion set in favor of this regulation, that many of the older hospital surgeons and physicians have within a year or two resigned. A contemporary holds the following language on the subject:—

> "Few men after forty years of work like or can withstand the active competition of their younger brethren. It is unfair to both when such is permitted. There is a period when retirement is a duty, and it is not just that the initiative of its suggestion should rest with those colleagues in office to whom other than disinterested motives may be attributed. We know of more than one instance in which personal reputation has been and is placed in jeopardy, and the interests of public institutions have been and are materially compromised, through the continuance in office for the exercise of active duties of professional men who have reached the age of fourscore. In the surgical profession there is a time when nature, not knowledge, fails; when advice, not action, should satisfy. In other professions it may be different. Judges on the Bench have expounded the accumulated wisdom of years with unfailing memory and unerring inference. Had they to write the same, or perform manipulations requiring energy and nerve, would their manuscripts or labors bear comparison with the efforts of their earlier years? We doubt it. Could octogenarian surgeons by speaking operate, what different results should we be enabled to record! So truly has the impropriety of this adherence to office been felt, so justly acknowledged are the ill effects which have followed its practice, that the board of one of our most celebrated hospitals has passed a resolution that its officers should resign at the age of sixty-five; the first of whom to come under its operation was one of the ablest and most competent, and, we may add, exceptional practitioners in the kingdom. Though in his particular case the institution sustained a grievous loss difficult to as adequately fill, it is far better that one should suffer, and one instance of this kind occur, than that a system of life-perpetuity in our public institutions should be permitted, and past services be set off against present deficiencies."

We take pleasure in recording the fact that a change has taken place in the head of the bureau of Army Medical Inspection. Dr. Perley, the first Medical Inspector-General, has resigned, and his place is filled by Dr. Joseph K. Barnes, formerly a surgeon of the U.S. Army, but more recently one of the Medical Inspectors. Dr. Barnes is a native of Pennsylvania, and entered the army as assistant-surgeon from that State, June 15, 1840. He was made a full surgeon August 29, 1856. The reasonable anticipations of important results to the service, and additions to the science of military hygiene, through this bureau, have failed of full realization through want of a competent head. Little or no direction was given to the course of inquiry, and no use whatever was made of the accumulating materials. We believe that branch of the army medical service will find in Dr. Barnes an executive officer fully capable of developing it in all its details.

Garibaldi.—Dr. Albanese writes from Caprera that the General's wound has been cicatrized since the 11th ultimo. Garibaldi now rides on horseback, and will, in a couple of months, lay by his crutches and use simply a stick. By the steady use of cold douching, the foot moves more easily, and it is to be hoped that, eventually, the patient will walk without much halting.—*Lancet.*

Reviews.

Report on the Treatment of Acute and Chronic Diarrhœa, with Sub-Nitrate of Bismuth, at Camp Downey, Cal., and Finley Hospital, Washington, D.C. By John B. Trask, M.D., Acting Assistant-Surgeon, U.S.A. San Francisco, 1863: pp. 20.

Dr. Trask, the author of this pamphlet, was the former editor of the *Pacific Medical and Surgical Journal.* He entered the volunteer medical corps from California, and was subsequently placed in charge of the Finley Hospital, Washington. He conducted this institution with great success; every ward and even bed gave evidence of the most rigid discipline, while a table amply supplied with vegetables proved him well versed in the relations between diet and nutrition.

The object of this pamphlet is to bring to the attention of the profession sub-nitrate of bismuth as a remedy in diarrhœa, whether acute or chronic. Dr T. truly observes: —"'Camp Diarrhœa' is one of those unaccountable, perplexing, annoying, and frequently obstinate maladies which all bodies of troops sooner or later suffer. To treat it successfully, and not decimate the strength of the command, often baffles the best directed efforts and skill of the surgeon." Passing over the discussion of the causes and conditions of this disease, we will come at once to the substance of the pamphlet. While in charge of Camp Downey, Cal., a severe form of diarrhœa appeared. The bismuth treatment was resorted to, with the following results:—

> "The total number of cases submitted to the treatment of bismuth, combined and alone, at Camp Downey, numbers seventy-eight; the total of all the cases of diarrhœa from the 4th Sept. was ninety-four. The strength of the command during the period of the epidemic was five hundred rank and file. The following are the statistics of the treatment as appears on my sick-report, derived from entry, and return to duty. Between the 4th Sept. and the 22d, nineteen cases took the following for diarrhœa: Bismuth Sub-Nit. gr. xv., Sub-Mur. Hydrarg. gr. x. No other remedy. These cases returned to duty at the end of twenty-four hours. There were eight cases who took the following: Bismuth Sub-Nit. gr. x., Sub-Mur. Hyd. gr. x. The diarrhœa was arrested in thirty-six hours on an average. There was much nausea in some of these cases after this remedy had been taken, and, when it occurred, the patient had not more than three evacuations until twelve or fifteen hours afterwards; the discharges were then free, and usually amounted to four or five in number, and taking place at lengthening intervals. The first two discharges occurring at the end of this period were dark and tar-like; those which took place later were yellowish and slightly green. In four of these eight cases the green color in the fæces proceeded from *altered blood* alone. On the second day a light dose of oil was given, and these men returned to duty. The twenty-seven cases here enumerated had the disease in its moderate form. There were twelve cases in which bismuth alone was given in doses of twenty grains. In all these the diarrhœa was promptly arrested within the day; not one of those men went to the sink after night. Within six hours after the exhibition of the remedy, the abdominal pains and flatulence ceased, and the men obtained sleep without the use of opiates; all these cases required a mild laxative on the following day, which was followed by one full and dark stool, and ordinarily two lighter ones within the twelve hours; they were returned to duty the following day. In fourteen cases with whom the disease was more severe, the following prescription was given: Bismuth Sub-Nit. gr. xxv., Sub-Mur. Hyd. gr. x. In the greater portion of this number there was much nausea following the use of the remedy, and which came on between one and two hours after it was taken. The diarrhœa was soon subdued, and with it the attending pain; this took place commonly within nine hours. In six of these cases the discharges continued until tattoo, but there were none after that hour; there were five others in which no movement of the bowels took place after the lapse of six hours. In four of these cases a laxative was required on the second day, from the action of which from three

to four passages followed; most of these cases returned to duty on the third day, and all of them on the fourth day from the beginning of the treatment.

"In seventeen cases similar in character to the preceding, the same quantity of Bismuth was given, with one-half the quantity, gr. v. Sub-Mur. Hyd. There was but one of this number who had any nausea after taking the remedy. The diarrhœa in all of these men was arrested during the day. In eight cases a laxative was required on the second day; all these patients but one returned to duty on the third day.

"In five cases on whom the malady was very severe—in which the discharges occurred each hour, with vomiting and nausea, as well as extreme prostration—the quantity of Bismuth exhibited was forty grains, with Sub-Mur. Hyd. grains three, at a single dose; in each the evacuations were promptly arrested, with the subsidence of the gastric disturbance. There were also three other cases in which fifty grains of the remedy as above was given. In all these eight cases there was no movement of the bowels at the expiration of eight hours; all of them required a laxative at the end of twenty-four hours."

It was not until he became the Surgeon-in-charge of the Finley Hospital, Washington, that he had an opportunity of proving the value of the bismuth in the chronic form of diarrhœa. It proved equally as successful as in the acute form. The following is the summary of its use in the chronic diarrhœas:—

"Where the malady had existed over nine days, I regard it as belonging to the chronic stage, and use it as such. The number of patients on whom it has continued from ten to twelve days, was one hundred and fifteen; of this number seventy-five took Bismuth in doses of sixty grains, each day, at one dose; the longest period of the continuance of the diarrhœa was four days, the shortest period one day. Of the seventy-eight remaining, seven cases took each day eighty grains at one dose; the discharges ceased entirely in all on the fourth day. The remaining seventy-one took the same quantity of Bismuth in forty grain doses twice a day, with an average result of four and one-half days to the cessation of the evacuations from the period at which the remedy was first given. All that remain had the disease from twenty to two hundred and ten days; these foot up seventy-four cases. There were eleven of this number on whom it had existed from ninety-four days to the longest period named. With the exception of the latter, these men were treated with doses of sixty grains daily; a few of them took eighty grains in divided doses for one or two days. The average period of the treatment was five and one-half days, at which time the discharges ceased permanently. There were none of these cases that had less than six movements of the bowels within twenty-four hours, and in many of the cases they were nearly or quite doubled."

We are not altogether satisfied with Dr. Trask's views of the treatment of diarrhœas, but we cannot doubt that bismuth has been very successful in his hands. The remedy is worthy of trial by army surgeons who are often so much perplexed by these cases.

Correspondence.

WARM WATER IN THE TREATMENT OF ACUTE OTITIS.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—In your issue of Aug. 15th there appears an article by Dr. D. B. St. John Roosa, in which the writer recommends warm water as a remedy for the excessive pain which always accompanies acute otitis. He also suggests that "Dr. V. Troltsch, of Wurzburg, Germany, was the first to recommend this remedy as particularly adapted to quieting pain in the ear."

More than twenty-five years ago, Dr. John Ramsey, now a retired physician, residing in this place, employed warm water freely and almost exclusively in a case of acute otitis, which was caused by an insect lodging in the auditory canal. Since that time he has often made use of the same remedy with the happiest effects, particularly for the purpose of removing foreign bodies from the auditory passage. His method of operating has generally been to place the patient with his head lying flat upon a stand or table, with the affected ear looking upwards, so as to keep the water for some time in contact with the membrana tympani.

For the relief of that distressing complaint, otalgia, Dr. R. has also frequently employed this remedy, and generally with satisfactory results. I suppose it is of very little consequence who first used warm water in diseases of the ear, but if the discovery is worth publishing at all, let us place the credit where it belongs, and where it *does* belong I am quite unable to say.

I close with a brief description of a case which occurred in my own practice about four weeks ago. A stout, athletic man came to me late in the evening, half crazed with the incessant buzzing of an insect in his ear. I at once pursued the course specified above, injecting warm soap-and-water freely, with the patient's head lying flat upon the table. The buzzing gradually decreased, and soon ceased entirely, but the insect still remained lodged in the canal. I therefore concluded that it would have to be brought away piecemeal by repeated injections of water. The following morning, with the patient in the sitting posture, I injected a large and continuous stream of warm water, with a slight degree of force. In a short time I washed away a winged insect considerably larger than a common house-fly, which had evidently been dead some hours. My patient experienced no further trouble or annoyance. It seems to me that the necessity for *poking* in the ear for the removal of foreign bodies will rarely occur, if the water be faithfully and perseveringly tried.

Yours, etc.,
I. N. DANFORTH, M.D.

GREENFIELD, N. H., Aug. 27, 1863.

PRIMARY EDUCATION OF MEDICAL MEN.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—I think you do not over-estimate the primary or common-school education of the medical profession. As a contribution to the subject I inclose to you a few medical certificates which I have taken from the files of a public institution of this city. The certificates date back only a month or two. Hundreds more could be sent if necessary.

M.D.

This may cirtafy that ——— ——— has been confined on board of Canal Boat A Nelson laying at Pear 17 East River. It would be better for boath mother and child to have her removed amediately.

This man sick under inflamatory rhumatismo has spent his last money to Doctor to eure and unsuccesfull he has been sick since last 6 weeks has been in the dispensary nothing can relieve him. . . I deliver him this present certilleat.

This Certifies that ——— ——— horn in the state of Connetieat lived in this City sence last Feby. has been an inmate of this institution about ono month. She has one hip dislocated and requires surgical treatment which are not at hand at this institution, she is therefore reccommended to———

This is to eertify that ——— ——— has been under my phiseal atention for the last three months suffring severely from a cold wich settled on her lungs but as she is not able to pay any more exspenses she wishes to be taken where she ean have a proper attention hoping to recover ones more to health. This eertificate is written in favor of ——— ——— and as a true fackt I singnefy the same with my own hand.

FRACTURE OF THE SKULL FROM BLOWS OF THE FIST.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—In the AMERICAN MEDICAL TIMES for Aug. 22, 1863, Dr. Alfred Mercer of Syracuse, N. Y., communicates a case of fracture of the skull by three blows of the fist. He describes the fracture, which was about the temporal region, and asks, "Could the fist have produced such a fracture?" * * Can any of your numerous readers, with illustrative cases, throw any light on the subject?"

A somewhat similar case to that reported by Dr. Mercer, occurred six or eight years ago in the city of Buffalo. A

Mr. Wentworth was struck, I think, two blows by a very powerful man named Weishuhn (pronounced Wizoon), one blow being given when he was lying on the floor. Mr. W. was taken home, and died a few days after. Post-mortem revealed fracture of the skull. Weishuhn was tried and convicted of manslaughter. Several of the prominent medical men of the city testified in the case, including Professor F. H. Hamilton, then a resident of Buffalo, who performed a number of experiments on the cadaver to test the force required to fracture the skull, some of which I saw.

The trial, conducted on the part of the defence by Eli Cook, Esq., was reported in the daily papers, and I think very fully in the *Buffalo Medical Journal* of the month following.

Yours, etc.,
W. H. Butler, M.D.,
Act.-Assist. Surg. U.S.A.

U.S. General Hospital, Armory Square,
Washington, Aug. 27, 1863.

FEES FOR LIFE INSURANCE EXAMINATIONS.

[To the Editor of the American Medical Times.]

Sir:—Some weeks ago you called the attention of the profession to the disproportionately small fee-charge for Life Insurance Examinations. I think something more should be said, and the attention of medical men and societies still further be directed to the redress of a grievance of long standing and wide diffusion.

The stability and security of Life Insurance Companies depend in a great measure upon their medical examiners; therefore the agents are charged to procure men of the best standing and ability in the profession. The examination must be of the closest and most searching kind, and consists of a careful scrutiny of all the organs, and an inquiry into the early history of the patient. A slight omission or error may bring a loss to the company of thousands of dollars.

And all this for the paltry sum of one dollar. This is the general custom, and the price agreed on in all the fee bills that I have seen.

Insurance Companies are not charitable institutions, but are for the most part very wealthy corporations, and should pay as much for such examinations as poor patients. Five dollars is as little as should be charged, and no respectable practitioner charges less in private practice for such examinations, nor can they afford to do it for less for these companies.

The matter is in the hands of the better class of the profession, and may be easily righted; and it is to be hoped that some concerted action may be taken in justice to ourselves and the public. Yours, etc.,
P. J. Farnsworth, M.D.

Lyons, Iowa, Aug. 20, 1863.

Army Medical Intelligence.

ORDERS, CHANGES, &c.

The name of the Hospital Steamer "D. A. Janeway," has been changed to "Chas. McDougall."

Surgeon George Hammond, U.S.A., was lost overboard from the Hospital Steamer R. C. Wood, on the Mississippi. He is supposed to have been drowned, though hopes are entertained that he may have reached the shore, as he was an expert swimmer.

By direction of the President, Surgeon J. R. Brown, 82d Illinois Vols., is hereby dismissed the service of the United States, with loss of all pay and allowances, for disloyalty and treasonable language.

By direction of the President, Assistant-Surgeon Clifford J. Parker, 5th Pennsylvania Cavalry, is hereby dishonorably discharged the service of the United States, for signing a false certificate as to his physical condition.

Assistant-Surgeon Elbert Rowland, 127th New York Vols., dismissed by Special Orders No. 281, current series, from this office, for disobedience of orders, in failing to report for medical treatment in this city, is hereby restored to the service, provided the vacancy has not been filled, evidence of which must be obtained from the Governor.

The record of the General Court-Martial, in the case of Assistant-Surgeon Cyrus D. Tuck, 9th Maine Vols., promulgated in General Order 41, Headquarters Department of the South, dated September 25, 1862, not showing that the Court or Judge-Advocate was sworn, the sentence of dismissal is inoperative. The offence, however, of which the accused was proved and found guilty, would justify his summary dismissal. The President, therefore, directs that Assistant-Surgeon Cyrus D. Tuck, be dismissed from the service of the United States, from the twenty-fifth day of September, 1862.

Surgeon W. D. Stewart, U.S.V., will report in person without delay to Brig.-General B. F. Kelly, commanding Department of West Virginia, for duty in that Department.

Assistant-Surgeon A. Wall, 77th Ohio Vols., is hereby relieved from duty at Military Prison Hospital, Alton, Ill., and will at once join his regiment in the field.

Surgeon W. J. Sloan, U.S.A., is hereby relieved from duty as a member of the Board to retire disabled officers, convened by virtue of Special Orders 307, July 11, 1863, from this office, now in session at Wilmington, Del., and Surgeon E. J. Baily, U.S.A., is detailed as a member of said Board, in his place.

The following officers will at once proceed to Wilmington, Del., and report for examination to Major-General Irvin McDowell, President of the Retiring Board convened by Special Orders 307, July 22, 1863, from this office:—

Surgeon Burton Randall, U.S.A.; Surgeon J. J. B. Wright, U.S.A.

The following assignments of medical officers are hereby made:—

Assistant-Surgeon J. M. Shearer, 12th Pennsylvania Reserve Corps, now on duty in this city, will proceed without delay to join his regiment in the field.

Assistant-Surgeon Roberts Bartholow, now on duty at Fort Schuyler, N. Y., will report in person without delay to the Medical Director, Department of Washington, for duty.

Leave of absence is granted the following named officer on surgeon's certificate of disability:—

Assistant-Surgeon W. C. Stein, 58th New York Vols., for twenty days.

A Board of Officers, to consist of Major J. H. Bell, Invalid Corps, and Assistant-Surgeon Lewis Taylor, U.S.A., will assemble at Philadelphia, Penn., on the 13th instant, to examine all convalescents for admission to the Invalid Corps that may be found in the various hospitals in and around Philadelphia.

The Board will be governed by General Orders 212, of 1863, from the War Department, and such special instructions as may be issued by the Provost Marshal-General.

The Surgeons-in-charge of the various hospitals will furnish every facility in their power to assist the Board in the organization of companies of the Invalid Corps, and their temporary command.

The Quartermaster's Department will furnish transportation to Harrisburg, Penn., to all companies thus organized.

Leave of absence is hereby granted the following officers:—

Surgeon J. H. Baxter, U.S.V., for twenty days.

Surgeon D. W. Bliss, U.S.V., for twenty days for the benefit of his health.

Surgeon R. H. Gilbert, U.S.V., when relieved as Medical Director at Fort Monroe, Va., by Surgeon C. Sutherland, U.S.A., will report in person without delay for duty to Major-General Meade, commanding Army of the Potomac.

Assistant-Surgeon G. W. Johnson, 25th Indiana Vols., is hereby discharged the service of the United States for incompetence.

Surgeon Henry Root, 58th New York Vols., is hereby honorably discharged the service of the United States on account of physical disability.

Surgeon C. D. Moore, 13th Kentucky Vols., dismissed by Special Orders 244, of June 1, 1863, from this office, is hereby restored to his command, with pay from the time he rejoins his regiment for duty, provided the vacancy has not been filled, evidence of which must be obtained from the Governor.

The resignation of the following officer has been accepted by the President, to take effect from the date opposite his name:—

Surgeon E. C. Franklin, U.S.A., Aug. 5, 1863.

Leave of absence is granted the following named officer on surgeon's certificate of disability:—

Surgeon Geo. S. Gale, 1st Vermont Cavalry, for thirty days.

Surgeon W. H. Worthington, 93d Pennsylvania Vols., for twenty days.

The following assignment of medical officers is hereby made:—

Surgeon A. P. Meylert, U.S.V., now at Louisville, Ky., to be assigned to duty as Medical Purveyor in that city.

The following named medical officers are hereby detailed for duty connected with the draft in the following States, and will report at once by letter to the Provost Marshals-General:—

Maine,
New Hampshire, } Assistant-Surgeon H. E. Brown, U.S.A.
Vermont,
Massachusetts: Surgeon A. N. McLaren, U.S.A.
Rhode Island,
Connecticut, } Surgeon L. A. Edwards, U.S.A.
New York: Assistant-Surgeon W. Webster, U.S.A.
Pennsylvania: Assistant-Surgeon C. H. Alden, U.S.A.

Leave of absence on surgeon's certificate of disability has been granted, for twenty days, to Surgeon N. D. Ferguson, 8th New York Cavalry, and Assistant Surgeon D. C. Spalding, 6th Michigan Cavalry.

Leave of absence for fifteen days has been granted Acting Assistant-Surgeon F. P. Sprague, U.S.A.

Medical Inspector John Wilson, U.S.A., has been ordered to report in person for duty to the Medical Inspector-General.

Surgeon John Wilson, U.S.V., was promoted Medical Inspector, U.S.A., vice Barnes, promoted

Surgeon G. W. Varnum's resignation has been accepted by the President, to take effect August 28, 1863.

The sanitary condition of the Departments of the South and the Gulf requiring special attention and care at this time, it is ordered:—

That Surgeon-General William A. Hammond proceed by the first steamer sailing from New York to Hilton Head and Charleston harbor, thence to Key West and New Orleans. He will establish his Headquarters in the Department of the Gulf until further orders, giving his special personal attention to the medical branch of the service in that Department and in the Department of the South, securing the adoption of the proper sanitary measures required for the preservation of the health of the armies in those Departments. He will report to the Secretary of War every ten days.

Original Lectures.

CYANOSIS.

By J. LEWIS SMITH, M.D,

PHYSICIAN TO THE ORPHAN HOME AND ASYLUM, LECTURER IN THE UNIVERSITY MED. COLLEGE.

[Being a Paper read before the N. Y. Academy of Medicine, February 18 and March 4, 1868.]

The paper which I have prepared on cyanosis is statistical. It consists of an analysis of 191 cases. Of these fifty-two occurred on the continent, 107 in Great Britain, and the remainder, thirty-two, in this country. For so large a number, and for many records of much value, I am greatly indebted to the pathological societies which have, for the most part, been organized since any one has made this disease the subject of statistical inquiry.

A few patients, whose cases are embodied in these statistics, died when two or three days old, and as all feeble new-born infants are apt to be livid, it may be said that there is no certainty that such are examples of the cyanotic disease. Whether cases in which death occurred early were employed in the statistics or rejected, depended on the character of the observers and of the malformations. If the observers were men of reputation and known accuracy, and the malformations were such as in older children produce cyanosis, they were employed.

The term cyanosis, or blue disease, has been differently used by writers. Some apply it to cases of transient, as well as permanent lividity. Others, including the majority of pathologists, restrict its application to those cases of carbonaceous and non-oxygenated blood, due to some permanent abnormal state of the economy, and therefore continuing till the close of life. It is used by us in the latter signification.

There seems to be a tendency, on the part of some, to ignore cyanosis as a disease. Occasionally in the annual reports of deaths in cities and states, in this country, the name does not appear in the list of deaths for several consecutive years, the term malformation or malformation of the heart, being used instead. This misconception of the nature of cyanosis occurs probably in consequence of its name giving rise to the belief that lividity, which in itself is a trivial matter, is its essential characteristic, while in truth it is only a sign or feature, although conspicuous, and indeed the only one by which the disease can be recognised. Cyanosis is actually a blood disease. Its pathological state may be expressed as follows:—Blood venous in character in the arteries as well as veins. It would be better did its name express its nature, as in leucocythemia, but medical nomenclature is generally defective. A symptom or appearance is often selected as a name, and no harm is really done, provided we are not led into the belief that this symptom or appearance is the disease itself.

Many, perhaps, think that as cyanosis is dependent on a malformation, and is therefore incurable, a knowledge of it is of little use to the physician. But in medicine, as in all physical sciences, there is such a co-relation of facts, that those not of a practical nature frequently throw light on such as are of the greatest utility; so that it may be truly said, that time is not misspent in acquiring knowledge in any part of the vast domain of medicine. Besides, as John Hunter well said, an acquaintance with incurable diseases is useful to the physician, that he may be deterred from unnecessary if not pernicious treatment.

The ancient physicians, so far as can be determined from their writings still extant, were ignorant of cyanosis; whether they overlooked it, or whether those early ages were exempt from it, and the malformation on which it depends, is peculiar to a posterity physically degenerate. The blue disease described by Hippocrates (*De Morbis*, lib. ii. sect. v., page 485, Ed. de Foe's, 1621) was probably some acute febrile affection. Galen, whose voluminous writings, with an excellent index, are still extant, and whose comprehensive mind embraced the whole range of medical science of the second century, makes no mention of it, so far as I can find. In the middle ages, as appears from a remark of Boerhaave (*Diseases of the Humors*, Acad. Lect. § 732), the common people believed the cyanotic to be the victims of evil spirits; and it is probable that physicians, during this long period of superstition and intellectual lethargy, embraced the popular belief.

On the revival of learning, pathological anatomy began to be more thoroughly and intelligently studied, but it is evident that before the great discovery of Harvey, in the seventeenth century, it was impossible to refer cyanosis to its true cause. In the latter part of the century so auspiciously opened by Harvey's genius, malformations of the heart were observed and described by some pathologists on the continent in cases in which cyanosis must have been present; but it is uncertain, from the brief records which they have left, whether any of them understood the dependence of this disease on the abnormal state of the heart. Boerhaave, in the beginning of the 18th century, attributes "a livid or black color diffused throughout the whole skin," evidently referring to cyanosis, to "1, a relaxation of the vessels, while the *vis a tergo* remains the same, or, 2, to a too sudden increased pressure behind, without a relaxation of the vessels." Vieussens, who was a contemporary of Boerhaave, and was more thorough in the examination of morbid as well as healthy structure, narrated the history of a cyanotic patient, with a description of the malformation. But the one who first gave particular attention to the blue disease was Morgagni. This Paduan professor, far excelling his predecessors in thoroughness of observation and accuracy of deduction, broached a theory in explanation of the disease which now, after the lapse of more than a century, has many adherents. In the same century with Morgagni, the 18th, but subsequently to his time, Dr. Pulteney, Wm. Hunter, Baillie, Wilson, and Abernethy in Great Britain, and Jurine and Sandifort on the continent, may be mentioned among those who contributed to a knowledge of cyanosis by the publication of cases with a description of the malformations. Yet, when the present century commenced, no monograph or dissertation had appeared on this disease; and notwithstanding the publication of cases from time to time, the profession, generally, were almost totally unacquainted with its nature. No better idea can be given of the prevailing ignorance in reference to cyanosis at this period than by quoting from the history of a case, narrated by Ribes in 1814 (*Bull. de la Fac. de Méd.*, Paris, 1815). "Many physicians of Amsterdam," says he, "were at different times consulted on the subject of this affection, no one of whom understood its true cause, its essential character. One considered it as partaking of the nature of epilepsy, and caused by the irritation in the nervous system which the wound in the finger produced, the cyanosis having commenced immediately after severe contusion of the finger. Others attributed it to the presence of intestinal worms. Some physicians pronounced it an injury of the liver or spleen. Many held it to be a scorbutic affection. One only believed it to be the result of an unknown organic disease."

Since the commencement of the present century the blue disease has received a large share of attention. According to Forbes's Medical Bibliography, the first dissertation on the subject appeared in 1805, from the pen of Seiler, and from this time till 1832 no fewer than twenty-eight dissertations or monographs were published, either on cyanosis, or on malformations which produce it or at least relate to it. In the list of writers are some of the most eminent names in the profession, as Louis and Bouillaud. The number who have written on this subject since 1832 probably exceeds the number of previous writers. Of those who have contributed most to our knowledge of the disease may be mentioned Farre, Chevers, and Peacock in Great Britain, Gintrac on the continent, and Moreton Stillé in this country. Farre, Chevers, and Peacock wrote on malformations of the heart, alluding incidentally to cyanosis, but their writings contain valuable matter for statistics bearing on the latter subject. Farre's book was published in 1814, and is out of print; Chevers published his papers in the Lond. Med. Gazette, commencing in the year 1845 and running through several successive volumes. Peaeock's treatise was published in 1858. It contains several original cases, previously narrated by him to the London Pathological Society. The paper by Moreton Stillé, which has attracted much attention, especially in Europe, was his Inaugural Thesis, and was published in the Amer. Jour. of Med. Sci., in 1844. This paper relates entirely, in the words of the author, to "the laws of the causation of cyanosis." The only really complete statistical paper on the blue disease is that by M. Giutrae, published in 1824, in Paris, and embracing all the cases which had been accurately reported up to that time, namely, fifty three. He, indeed, exhausted the subject for the period in which he wrote, and were it not for the vast accumulation of material since, my task would not have been undertaken.

Two theories in explanation of the occurrence of cyanosis have divided the profession; the one attributing it to obstruction at the centre of circulation, and consequent venous congestion: the other, to admixture of venous and arterial blood through openings in the septa of the heart, or through the ductus arteriosus. The former of these theories originated with Morgagui more than one hundred years ago, and is essentially the same as that advocated by Stillé. Stillé errs in placing Morgagni among the advocates of the other system. The second theory, or that which attributes cyanosis to admixture of venous and arterial blood, is said by Dr. Peacoek to have originated with Hunter, but its ablest supporter was Gintrae. Of late there are some pathologists who do not believe that either theory is sufficient to explain the cause of cyanosis, and that the true explanation lies somewhere between the two. Among the most conspicuous of these is Prof. Walshe of London. These theories will be considered in the proper places.

A venous or carbonaceous and non-oxygenated state of the blood may be produced by causes operating in three distinct ways:—First, by obstruction in the air passages, preventing the necessary entrance of air, such as foreign bodies in the larynx, the membranous deposit of croup, thickening of the mucous membrane in severe bronchitis; but the venous condition of the blood, in these cases, is too transient to entitle it to the name cyanosis. Secondly, it may be due to the state of the lungs themselves; but the recorded cases of permanent venous blood or cyanosis in which these organs were in fault are so few that they may be narrated.

In the Edinburgh Med. Jour. for October, 1805, Dr. Alex. Marcet, physician to Guy's Hospital, published the case of a lady, twenty-one years old, who during the last part of her life was cyanotic. The autopsy was made by Sir, then Mr. Astley Cooper. The heart was healthy; the lungs seemed distended by an unusual quantity of dark-colored blood, but were free from tubercles or any other appearance of disease; their substance seemed rather more compact than usual, particularly in the left lobe, but still it did not sink in water. "The lungs adhered everywhere to the inner surface of the chest, to the diaphragm, and to the pleura covering the pericardium. These adhesions were some of long standing, others just forming; these last composed of coagulable lymph, having the appearance and texture of jelly, and exhibiting signs of incipient organization." In this case, which subsequent writers have occasionally alluded to, the cyanosis was attributed to the extensive attachment of the surface of the lungs which embarrassed the movements of this organ.

In the April number of the Glasgow Medical Jour., 1855, Dr. Joseph Bell published the history of a man who died at the age of twenty-three years. During the last four or five years of his life he was troubled with a cough, his fingers and toes were bulbous, and nails incurvated. He had general lividity, or duskiness, at least four years. The heart was lower in the chest, and more to the right than usual, and was enlarged; the ventricles were dilated, especially the right, the walls of which were attenuated, but all the valves were healthy; lungs extensively emphysematous; mucous membrane of bronchial tubes thickened and congested. The obstacle to the arterialization of the blood in this case was believed to be the extensive emphysema. In both patients the heart appears to have been perfect.

The following case was narrated by Dr. Peacock to the Lond. Path. Soc., April 5, 1859. A female twenty-four years old, had lividity of the whole surface for a month preceding her death. She had spinal curvature, complained of headache, and finally became delirious, and died comatose. "The heart was large, weighing oz. xijss; great dilation of the right auricle, right ventricle, and the pulmonary artery." The walls of the right ventricle measured four and a half lines at the thickest part. "The pulmonary artery allowed the passage of a ball forty-eight French lines in circumference, while the aortic orifice only admitted one measuring thirty-three lines. The fossa of the foramen ovale was very greatly expanded, and the valve was defective at its anterior edge, leaving an aperture between it and the isthmus of about three lines in diameter." Dr. Peacoek, who has given much attention to malformations of the heart, and is the best authority on this subject, believes the cyanosis in this case was due to compression of the lungs from the spinal curvature, but thinks it questionable whether it would have been present had the heart been in a perfectly normal state.

In the British and Foreign Medico-Chir. Rev., Jan., 1860, copied from a continental journal, is the history of "a girl, one year old, apparently healthy to her fifth month; then she presented symptoms of asphyxia, with sibilant respiration, irregular and tumultuous action of the heart, aggravated by lying on the right side, and accompanied by blueness of the face and hands. The attacks occurred in paroxysms, with increased frequency and violence, in one of which the child died. The discoloration of the skin remained during the intervals. The heart was found to be normal, the ductus arteriosus closed, but the foramen ovale sufficiently open to permit the passage of a bristle. The right lung presented the usual lobar divisions. On the inner surface, towards the heart, some large vesicles projected above the surface, varying in size from a hemp-seed to a pea. The left lung presented the main divisions into lobes; the lower one consisted of three tongue-shaped lobules, their parenchyma being throughout pervious to air. The upper part of the left lung formed a large fibrous sac, with very thin parietes, the pulmonary tissue being cut off abruptly at its margin. The sac was full of air, lined with a smooth mucous membrane which presented full and prominent folds. The largest folds were found near the root of the lungs, where they were found to overlay the orifices of the bronchi. There was some chalky deposit on the posterior wall of the sac. The sac measured vertically 111 millimetres, transversely 93 millimetres (4·36 by 3·65 inches)." The cyanosis in this case, which was reported by Prof. Meyer of Zurieh, was believed by him to be due to malformation of the lungs of an emphysematous character.

These four are the only cases which I have been able to find in which cyanosis was due to the condition of the lungs, and they are so few that they may be left out of account in the study of the disease.

Thirdly, imperfect arterialization of the blood may be due to causes which affect directly the circulatory system, such as, on the one hand, probably, certain malignant or grave diseases, as cholera, in which the circulation is embarrassed by the inspissation of the blood; and, on the other hand, structural errors, preventing the free and regular flow of blood to or from the lungs. Under this latter head come all cases of cyanosis, with a few exceptions, like those mentioned above, in which the lungs are in fault, and the error of structure has been found in every case either in the heart or in the great vessels in immediate connexion with it.

Writers on cyanosis state that there is a preponderance of males to females affected with it. Aberle of Vienna says that two thirds were males in an aggregate of 180 cases which he collated. In Gintrac's cases 28 were males and 16 females; in Stillé's, 41 were males and 31 females. The sex is recorded in 134 of the cases collected by me, of which 78 were males, 56 females; and if those cases are excluded in which cyanosis was due to obstruction at the mouth of the pulmonary artery, the number of the two sexes is the same. Since January, 1858, according to the Reports of the City Inspector, 207 have died in this city from cyanosis, of which number 117 were males, 90 females. In England, for two years, 418 males died of cyanosis, and 273 females. Although statistics of different cities and countries agree in the fact of an excess of males over females, there does not appear to be that great preponderance of males which the earlier writers on this disease believed to exist.

The cause of the malformation on which cyanosis depends is wrapt in much obscurity. Sometimes mothers attribute it to strong mental impressions felt during uterogestation. The mother of a patient treated by Dr. Peacock stated that, "two months before her confinement, she was frightened by seeing a child killed, and never recovered from the shock she sustained." (*Malf. of Heart*, p. 37.) In another case "the mother was much out of health, and stated that, when pregnant with the child, she was greatly alarmed by seeing a man who was dying of asthma." (Op. cit., page 57.) In another instance the mother was frightened at the fifth month of pregnancy (page 41); and in still another case, recorded by Dr. Peacock, the mother, four or five months before her confinement, was greatly alarmed by her husband, who was insane, standing over her for two hours with a loaded pistol." (Page 43.)

Occasionally the malformation appears to be due to some vice or taint in the system of one or both parents. In a case quoted in the Gazette Medicale for Dec. 28. 1850, from another continental journal, it is stated that "the mother, who had formerly suffered from rickets, gave birth to five children, all of whom died immediately or shortly after birth with symptoms of cyanosis. The father died at the age of thirty-six of phthisis." Dr. Peacock relates a case in which the father was livid, and had the "pigeon-breast" common in the cyanotic. In the history of a patient, which was communicated by Cooper to Farre (Case 163), it is related that "vices of conformation of the heart appeared to have been inherent in the family. Of 12 infants only 4 survived, and more presented signs of heart-disease." Dr. Buchanan relates the history of a child which was the second that had suffered and died in the same family in the same way (Case 40). A patient treated by Mr. Leonard was the sixth child of the family who had died at about the same age with symptoms of cyanosis. Such instances are, however, exceptional. Ordinarily, the cyanotic have not only healthy parents but healthy brothers and sisters.

A patient whose history is given by Dr. William Hunter, was born at the eighth month, but in nearly all other cases the full period of uterine existence was reached.

The opinion was long since expressed by Gintrac that the number affected with cyanosis, to the entire population, varies in different countries. It is probable that the occurrence of the blue disease is not greatly, if at all, influenced by the nationality, but it is certainly dependent to a considerable extent on the condition of society. It is less frequent in a community in comfortable circumstances, and engaged in wholesome and quiet occupations. Pure air and outdoor exercise, plain nutritious diet, freedom from cares and anxieties, in fine, causes which promote the physical well-being, diminish the liability to an ill-formed and cyanotic offspring. And, conversely, impure air, improper and insufficient diet, grief, etc., increase the percentage of cyanotic cases. Hence it is a rare disease in the rural districts, and comparatively frequent in the cities, especially in a large city like New York, which contains a numerous indigent and care-worn population, living from year to year in the midst of agencies which operate stealthily but certainly to enervate the system and undermine the health.

These remarks are abundantly substantiated by statistics. In New York city, for the six years ending with 1860, there was one death from cyanosis to 436 deaths from all causes; and in Brooklyn the proportion estimated for two years is about the same. On the other hand, in the State of Kentucky, which contains few large cities, and in the death reports of which cyanosis is included in the general term malformation, there was, during a period of five years, one death from malformation to 2469 from all cases. In the State of South Carolina, for three years, there was one death from cyanosis to 5018 from all causes. In the State of Massachusetts, for two years, there was one death from cyanosis to 1136 from all causes, and two-thirds of the cyanotic cases occurred in the counties of Suffolk, Essex, and Worcester, which contain large cities. In London there was one death from cyanosis to 755 from all causes during a period of three years. On the other hand, in England, including the city of London, there was, for the ten years ending with 1857, one death from cyanosis to 1589 from all causes; and in the rural districts of Monmouth and Wales there was only one death from cyanosis to 5578 deaths from all causes during a period of two years.

In 138 cases the records state at what time lividity was first observed. In 97 of these it was within the first week, and generally within a few hours of birth. In the remaining 41 cases it commenced as follows:—

In 3 at 2 weeks.
" 1 " 3 "
" 2 " 1 month.
" 7 from 1 to 2 months.
" 5 " 2 " 6 "
" 5 " 6 " 12 "
" 3 " 1 year to 2 years.
" 6 " 2 " " 5 "
" 1 " 5 " " 10 "
" 6 " 10 " " 20 "
" 1 " 20 " " 40 "
" 1 over 40 years.

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In these forty-one cases, in which blueness did not occur till after the age of one week, if the patient were less than two years old when it commenced there was frequently no obvious exciting cause, but above this age, with three exceptions, such a cause is known to have been present. It is interesting to observe how trivial the exciting cause frequently is, and equally interesting to note how long patients have enjoyed good health, not having the least lividity, although the anatomical vice to which the final development of cyanosis is due has existed from birth.

Dr. Theophilus Thompson relates in the *Medico-Chir. Trans.*, vol. xxv., the history of a lady, thirty-eight years old, who was well till an attack of Asiatic cholera, after which her health was permanently impaired. Two years before her death she passed through a course of fever, and from this time was cyanotic. In the *Philadelphia Med. Examiner*, June, 1850, Dr. Waters relates a case in which cyanosis began at the age of six years in an attack of measles. In a case published by Mr. Napper, in the *Lond. Med. Gazette*, 1841, the child fell at the age of six months, and from this time had cyanosis. A female, whose history is given by Prof. Tommasini of Bologna, and quoted by Bouillaud, became cyanotic at the age of twenty-five, in consequence of difficult parturition. In the *London Lancet*, 1842, Mr. Stedman relates a case in which cyanosis began at the age of ten weeks in an attack of convulsions. In the *American Jour. of Med. Sciences* 1847, Dr. John P. Harrison published the history of a baker, twenty years old, in whom cyanosis began five years previously after great effort in carrying wood. Louis and Bouillaud quote from M. Caillot the case of a child who became cyanotic at the age of two months in an attack of hooping-cough. Louis also narrates a case in which hooping-cough had the same effect at the age of twelve years. Ribes treated a child in whom the blue disease began at the age of three years from a severe contusion of the fingers. In a case related by Marx it commenced at the age of ten months from a blow on the back, inflicted by the mother. In the *Med. Times and Gazette* for 1855 Mr. Speer gives the history of a female, who, at the age of thirteen years, was put in a place requiring considerable exertion, and from this time was cyanotic. A patient, whose case is narrated by Cherrier, fell into a deep ditch in the winter season, and immediately after had a low fever, from which the blue disease commenced. In a case published by Tacconus the exciting cause was believed to be fright, in consequence of a fall from a great height, and in another, related by Bouillaud, it was a blow received on the epigastrium after the patient had passed the age of fifty years. Similar cases are related by Mayo and Peacock.

It will be seen that the exciting cause of cyanosis is usually such as produces a profound impression on the system, and affects the action of the heart. Precisely in what way it operates to develop the disease has not been satisfactorily explained. Mr. Mayo conjectures that, in the case related by him, there was previously some compensation which ceased or became inadequate in consequence of some change produced in the economy. Although cyanosis may not appear for months, or even years, there is rarely improvement for any considerable period after it is once developed. Appearances of amendment are deceptive. The disease, when not stationary, is progressive, and this explains the fact that few survive the middle period of life.

The symptoms of cyanosis vary in intensity in different patients, and in the same patient at different times, being milder if he is quiet and the mind calm, more severe if active or if the mind is agitated. In mild cases, in a state of rest, they nearly or quite disappear, so that a stranger would not suspect that there was any serious ailment. They are aggravated by any cause which accelerates the action of the heart. In some, cyanosis is increased by the most trivial disturbing influences, among which may be mentioned nursing, dentition, crying, coughing, and slight emotions of joy, sorrow, or anger. In more than one case it has been perceptibly increased by the stimulus of digestion, the color being deeper after a full meal than before.

The cyanotic hue varies in different individuals from duskiness to a deep purple, almost black color. It is usually most marked in the visage, especially the palpebræ, cheeks, nose, and lips, in the ears, fingers, and toes, and upon the mucous surfaces. It is sometimes, without any assignable cause, confined to a portion of the body. In a case related by Mr. Steel in the *London Lancet*, 1838, the upper part of the body was livid and œdematous, and the lower part pallid and shrunken, and yet the malformation of the heart was such as is commonly present in cyanosis. In the *London Med. Times*, March 8, 1845, copied from the *Gazette Médicale*, is the history of a child, six years old, in whom the color was deeper on the right than left side. There had been, however, hemiplegia of this side in infancy, but this had entirely passed off. On the other hand, in a case of rare malformation communicated by Cooper to Farre, in which the upper part of the system was supplied chiefly by arterial and the lower by venous blood, the discoloration was general. In rare instances livid maculæ have been observed, like those of purpura.

Those affected with cyanosis have generally at birth been well formed and of the usual size, and in most cases, for a considerable period after birth, the appetite is good, bowels regular, and the system well nourished. But when cyanosis becomes so severe, as it does sooner or later, that the symptoms are rarely absent, digestion is imperfectly performed, and the body becomes either emaciated or stunted and puny. It may be stated, as a rule, that nutrition is in inverse proportion to the gravity of the cyanosis. In thirty-three out of forty-one cases in which the condition of the system, as regards nutrition, was recorded either a short time previously to death or at the autopsy, the body was either considerably emaciated or else diminutive, and those who appeared to have been well nourished were usually such as had died early or of some inter-current disease.

In this connexion may be mentioned two interesting and curious abnormal developments. The chest is often flattened laterally with a projecting sternum, so as to present an appearance generally described in the records as "pigeon-breasted." Sometimes the most prominent part is directly over the heart, and in one or two cases the sternum was observed to be deflected towards the left. In the majority of the records, however, no mention is made of the external appearance of the chest.

The other abnormal development is more remarkable, and has never been satisfactorily explained. In twenty-eight cases it is stated that the tips of the fingers or toes, or both, were bulbous. This hypertrophy, if slight, is likely to be overlooked, and that it was observed and recorded in so many cases renders it probable that it was present in a much larger number. In one case the anatomical character of this enlargement was examined, and was believed to consist entirely of hypertrophied cellular tissue. The nails are often incurvated over the deformity. At a meeting of the Lond. Path. Soc. in 1859, Mr. Ogle narrated the history of a laborer, fifty years old, who had swelling, numbness, and lividity of the left arm, from the pressure of an aneurism, and the fingers on this side were clubbed as in cyanosis. Why this bulbous growth should occur in consequence of the circulation of carbonaceous and non-oxygenated blood must at present remain a mystery.

An interesting feature in cyanosis is the low grade of animal heat. The temperature of the body is in all cases below that of health. This is especially noticeable in the extremities. There has not been a sufficient number of accurate thermometric observations to determine whether the internal heat is usually reduced. The following only have been recorded:—Mr. Fletcher relates the history of a young man in the Medico-Chir. Trans., vol. xxv., in whom the thermometer placed in the mouth did not stand above 80° Fahrenheit. Hodgson reports the case of a man, twenty-five years old, in whom the thermometer placed on the tongue rose to 100°, while in his own case it was two or three degrees below that term. In an experiment recorded by Nasse, the instrument placed in the mouth fell little if at all below the healthy standard; applied to external parts, it stood at about 21° Reaumer.

The lack of heat is the source of great discomfort to a cyanotic patient. In mild weather he requires a fire to keep him warm, or an amount of clothing which to others would be intolerable, and in cold weather slight exposure strikes him with a chill. Nor can he increase his heat by active exercise, since his infirmity disqualifies him for this.

Although the temperature of the surface is so low, the occurrence of perspiration, sometimes profuse, is mentioned in several of the records.

THE distinguished physician, Sir Henry Holland, arrived in New Haven on Thursday last, and spent the day in calling upon several distinguished citizens. A New Haven paper says: He is past seventy years of age, but has lost none of his mental or physical activity. He uses neither cigars, tobacco, nor wine. Since 1855 he has extended his travels to Sweden, Lapland, Russia, Iceland, Jerusalem, Damascus, the Danube, Constantinople, Asia Minor, twice to the United States, and twice to Canada.—*Post.*

M. NÉLATON proposes and practises a new method of cauterisation, using a fine jet of flame, produced by the combustion of ordinary gas, for the purpose.

Original Communications.

CHEILOPLASTIC OPERATION.

SIMANOWSKI'S MODIFICATION OF DIEFFENBACH.

By FREDERIC D. LENTE, M.D.,

SURGEON TO WEST POINT FOUNDRY.

P. D., aged 75, a healthy, temperate subject, applied to me in May last in order to get advice concerning a cancer of the lower lip, which only appeared in March, and had already involved the whole vermilion border of the lip, and had extended down two-thirds of the distance to the base of the jaw, so rapid was its growth. I was compelled to defer the operation on account of absence from home for two weeks, during which time it had made some further progress.

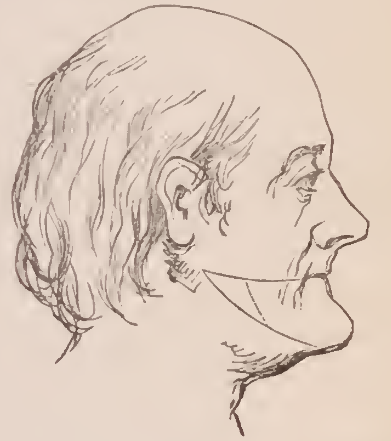
It was, of course, necessary to remove the entire lip, and the operation was performed in the following manner, with the assistance of Dr. Pryor, late House-Surgeon of Bellevue Hospital, and Dr. W. Young:—The patient having been thoroughly etherized, an incision was made from either angle of the mouth outwards, and curving a little upwards towards the ear, extending quite through the thickness of the cheek as far as the *masseter muscle*, then only down to the muscle for some distance further. Another incision was then made on either side, extending from the outer end of the first in a curvilinear form along the jaw, and gradually approaching its base, and finally running along the base to a point almost far enough to meet a vertical line dropped from the angle of the mouth. The diseased lip was then included in a V-shaped incision extending from the angles of the mouth, the apex extending a little below the base of the jaw, and detached from the bone.

The plastic portion of the operation was now continued by dissecting up the angle marked out by the above described curved incisions, forwards to some distance beyond the edge of the *masseter*, just so far in fact as was found necessary in order to allow the edges of the V incision to come easily together in the median line. A considerable number of pins and sutures were used, silver and silk, to bring the parts accurately in apposition; so much so, that no plasters were necessary, although they were applied in front for a few hours as a matter of precaution to prevent the disturbance of the ends of the pins. The point of greatest tension was secured by means of a needle recommended and used by Dr. G. Buck in similar cases, made by giving a trocar point to a small-sized knitting-needle, and then coating with silver; by drawing it through and cutting an inch or so for each suture, it may be used several times, if necessary, in the same operation. The moderate angular gap left on either side of the cheek by drawing forward the flaps, was easily filled up without any tension by approximating the edges of the first incisions.

Remarks.—This mode of repairing the loss of the lip and chin is much more satisfactory than other procedures commonly recommended, the detachment of the large lateral flaps allowing the edges to come together with remarkably little tension, while the gap, to be filled up after forming the lip, is so elongated by the manner in which the incisions are made, meeting at a very acute angle, that its edges are easily secured by ordinary fine silk sutures. The only objection is, in so aged a patient as mine, the loss of blood, which is much greater in this operation than in others. It is annoying in two ways—by exhausting the strength, and by flowing into the throat—thus interfering more or less with respiration while under the influence of the anæsthetic. The necessity of securing a considerable number of vessels, which was done with very fine silk, protracted the operation very much. To avoid the anticipated hæmorrhages as far as possible, that part of the operation which is usually done last was done first, in order not to be compelled to secure the same vessels twice. This was found to succeed, as there was but trifling hæmorrhage from the last incisions.

The success of the operation was perfect. At the end of four days the pins and most of the sutures had been removed, and union was perfect and accurate throughout; it was subsequently necessary to break up the adhesions at one point in order to allow the escape of matter, which formed to a moderate extent. The patient had no difficulty in eating, drinking, or talking, after a day or two. When he left for home, within two weeks after the operation, a new vermilion border was rapidly forming.

Within the last few days, that is, two months after the operation, I have seen the patient; no change has taken place for the last two weeks, according to the patient's account; the contraction resulting from the cicatrization is completed, and he has a good mouth, the lower lip, however, being somewhat shorter than the upper, but the border is quite natural, rather thin (as it generally is in a very aged person with no teeth). It will be observed, in the account of the operation, that no attempt was made to form a new vermilion border to the lip, as is usually recommended; this would have been difficult, would have prolonged an already tedious operation, would have rendered the pain and soreness succeeding it much more severe, from the tension of the sutures, and might have failed in its object from the subsequent swelling and inflammation. The sequel shows that it was entirely unnecessary; within a few weeks there was a smooth and uniform border to the lip.



The above sketch shows the lines of incision followed in the operation. The dotted line indicates the extent to which the flesh was drawn forward.

COLD SPRING, N.Y., Aug. 28, 1863.

BROMINE IN HOSPITAL GANGRENE.

By M. GOLDSMITH, Surgeon U.S.V.

I PRESENT the consolidated statement of the cases of hospital gangrene of which I have gathered the records from U.S. military hospitals in this city, in New Albany, Ind., Nashville and Murfreesboro, Tenn. In explanation I have to state that the roll and the reports of these cases in full are on file in the Surgeon-General's office. It will be perceived that amongst the cases treated with bromine there are recorded four deaths. One of these cases is reported as having been brought into the hospital moribund. Two were cases in which the disease attacked the track of ball wounds passing through the thigh, and in which the bromine was applied to the external parts, the apertures of entrance and exit only, and therefore did not touch the major part of the gangrenous surfaces. One, in which, with a wound like those just mentioned, the cellular tissue of the limb from the trochanter major to the malleoli was destroyed by cellulitis. It will also be noticed that in four cases the bromine is reported to have failed in arresting the gangrene. In each of these the bromine had been applied, I have reason to believe, much more frequently than is compatible with the establishment of granulation—for bromine is a caustic agent. In one case granulation occurred two days after the abandonment of the bromine, and the use of a weak solution of creasote; in two cases after the use of a solution of the persulphate of iron, and in one case after the use of a cow-dung poultice.

CONSOLIDATED STATEMENT OF CASES OF HOSPITAL GANGRENE, TREATED IN LOUISVILLE, NASHVILLE, MURFREESBORO, AND NEW ALBANY.

	Whole Number.	Recovered.	Died.	Amputations.	Average Duration of Treatment.		Percentage of Deaths.	
					Days.	Hours.		
Treated with Bromine in any way - - - - - -	152	148	4	0	5	14	2 65-100	
Treated with Bromine Pure exclusively - - - - -	27	25	2	0	2	22½		
Treated with Bromine in Solution exclusively - -	86	84	2	0	6	11⅓		
Treated with Bromine Pure after the Solution failed -	8	8	0	0	12	18		
Treated with Bromine after Nitric Acid failed - - -	23	22	0	1	3	16⅓		
Treated with Bromine after other Remedies failed -	8	8	0	0	3	4		
Treated with Nitric Acid exclusively - - - - -	13	5	8	0	3	14 2-5	69 54-100	50
Treated with other Remedies exclusively - - -	13	7	5	1	7	13 5-7	38 47-100	
Treated with other Remedies after Bromine had failed - - - - - - - -	4	4	0	0				

I beg here to call the attention of such of your readers as may be interested in the matter to the fact that almost all the surgeons who have adopted the bromine treatment of hospital gangrene rely now upon the use of the pure undiluted agent, the various solutions having been found less prompt in their effects, and, for the ends in view, less reliable.

LOUISVILLE, KY., Aug. 28, 1863.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, May 20, 1863.

DR. JAMES ANDERSON, PRESIDENT, IN THE CHAIR.

HOSPITAL GANGRENE.

(*Concluded.*)

DR. POST.—The last speaker has gone so fully into the subject of the history, etiology, and symptomatology of hospital gangrene, that I shall not dwell upon this department of the subject, but merely present to the Academy some observations that I have been able to make during a recent visit of inspection to the cities of Nashville, Louisville, and Murfreesboro. I have scarcely any remarks to make in addition to those made by Dr. Parker, with regard to the constitutional or local symptoms of this disease.

The disease attacked recent wounds, in several instances; in other cases the disease broke out in parts which had been suppurating for a considerable length of time, and when the process of cicatrization was far advanced. In other cases, or in one case in particular, there was no local lesion that was known to have preceded the gangrene—there was simply a slight vesicle to commence with upon the surface of the skin. One of the most formidable cases occurred in a patient where a seton had been worn for some time in the back.

The disease did not occur in a very large number of cases in any of the hospitals, and did not show any marked tendency to spread; indeed, the cases for the most part seemed to be remarkably sporadic. The disease was not traced in any of the cases to contagion from the application of matter of patients previously suffering from the disease. In one instance, in a hospital in Murfreesboro, there were, I think, nine cases congregated in one part, having been sent from the different hospitals in the neighborhood. That ward was not remarkably well ventilated, neither was its sanitary condition remarkably good; still the disease did not spread from these cases to other patients, although others had suppurating sores in that ward. There were three recent cases that I saw for only three or four days; in them the sloughing process had not been arrested; but there were a number of other cases where even cicatrization was advancing. There were no cases that spread to other patients. It was not found necessary to remove any of these patients to tents. There was nothing remarkable in regard to the character of the disease differing from hospital gangrene as described by authors, and as seen in other places. The disease occurred rather suddenly: a spot would first become gangrenous, and then spread, until a large portion of the skin, cellular tissue, and sometimes the fibrous and muscular tissues were converted into a soft putrid mass, of a highly offensive smell, and of an ashy hue. The disease seemed also to have a tendency to spread beneath the margin of the integument, by a sort of phagedenic ulceration. The muscular tissues resisted the progress of the disease more than the skin and cellular tissue. In some cases the areolar tissue was beautifully dissected out from between the muscles.

According to my observations, and according to the reports of the different surgeons, very much more depended upon the local treatment of the disease than the members would be led to infer after hearing Dr. Parker. Indeed, the local treatment seemed to have played the most important part in arresting the progress of the disease. The remedy used more than any other was one introduced by Dr. Middleton Goldsmith, Assistant Med. Director. I refer to bromine, or some of its preparations. It is principally with reference to the action of bromine as a local application that I have risen to speak. The preparations of bromine that have been used have been either the pure bromine, a dark red liquid with a pungent odor, or more frequently a preparation analogous to Lugol's solution of iodine—160 grains of the bromide of potassium are dissolved in 4 oz. of water, this solution is placed in a bottle, and an ounce of bromine is added, making a solution of the bromuretted bromide of potassium. In some cases there is a simple residuum, owing doubtless to some existing impurity in one or other of the ingredients. It is a reddish-colored fluid, from which the fumes of bromine are given off. The mode of making the application has varied somewhat with different surgeons of the hospitals I have visited, but those who used it with the most care and success used it in the manner which I will indicate. In the first place, after the sloughing process has been fully established, when the tissues involved have become positively putrid, and there is a disposition to form a separation between sound and healthy parts, all the dead portions are carefully detached by means of a scissors, after which the denuded part is thoroughly washed with a syringe and lukewarm water; after this the comp. sol. of bromine is brought in contact with every portion of the sore either by means of a camel's hair brush or a small syringe. If there be sinuses, the fluid is injected into them, and the same thing is done with the undermined integument. In case of a gunshot wound through the limb, when the syringe cannot easily be used, a small strip of old linen is attached to the eye of a probe after having been dipped in the solution, and drawn through the wound. This linen is then left in until the next day's dressing.

The first effect of the bromine was very remarkable in removing all offensive odor—the fetor would be removed in a very remarkable manner, so much so that you had to apply your nose close to the surface of the sore to detect any odor whatever. The next effect was to coagulate the albumen and leave the part as if varnished—there was no appearance of putrefaction whatever. The patients complained of severe pain at the time of the application, but I have reason to believe that such complaints were much exaggerated. The dressing applied after the application of the bromine varied in different cases. In most cases the surgeons were in the habit of applying yeast poultices, and they also used as a substitute for this a fermenting substance made by adding carbonate of soda and tartaric acid to a poultice. I suggested to them the propriety of substituting the bicarb. potash for the cream of tartar, on the ground that the gas would in that event be more slowly evolved. In other cases the liq. sod. chlorinata was used; in fact, numerous applications of the sort were made according to the peculiar notion of the Surgeon-in-charge.

I found that there were some of the surgeons in Nashville who were sceptical with regard to the advantages of bromine as a local application, they maintaining that they had better success from the use of nitric acid; but I observed that some of these gentlemen had applied it in rather a careless way, while they had used the nitric acid more thoroughly and with more care. There was one gentleman particularly who seemed very sceptical. I informed him that he had not applied it as carefully and as thoroughly as the other surgeons, and therefore he erred in a good effect. I also suggested that if he would use it in another way he would have like success. Since I have returned to the city I have received a letter from that gentleman, and he tells me that he has taken my advice with reference to its mode of application, and has been abundantly successful.

With regard to the constitutional treatment, I believe there can be very little discrepancy of opinion concerning the use of tonics, stimulants, and good food, in this disease.

I will observe that those gentlemen who have used bromine so largely look upon it as an antidote to the poison, whatever it is, of hospital gangrene, and consequently they do not advocate the free circulation of fresh air as they otherwise would.

I observed that bromine was used for disinfecting the atmosphere of the ward, by pouring it into saucers, or by carrying an open-mouthed bottle containing the liquor through the ward. This was done five minutes at a time three times a day, and the fact that the gangrene did not spread where bromine was used, seems strong proof of the existence of the property claimed for it.

The frequency of its application varied with different surgeons from once to twice or three times in twenty-four hours. When the surface of the granulations became visible, the solution was weakened. In the cases that I had the opportunity of seeing, the disease was arrested throughout the great body of the sore within two or three days. In the case of the seton in the back, the disease was not arrested ten days after the application, but I have afterwards understood from Dr. Goldsmith that the disease was finally entirely checked.

I have come to the conclusion, from what I have seen, that the application in the treatment of hospital gangrene is very highly conducive to the welfare of the patient, and I think that it will prevent the spread of the disease.

There is one important fact connected with bromine which I think well worth relating. I saw at Louisville a case of hospital gangrene of the leg, where, in the course of the disease, the posterior tibial artery became involved, and hæmorrhage occurred. The interesting feature in this was that the Surgeon-in-charge tied the artery at the bottom of the sloughing surface, and applied the bromine immediately over it. I saw that case a little less than a week after the application occurred, and the case was doing remarkably well. The ligature had separated the day before I saw it, and at that time the sore was in a state of healthy granulation. I am unable to say whether any further hæmorrhage occurred. Dr. Goldsmith informed me that the case was the fourth one where such a result was obtained from the application of bromine. This is a very remarkable fact, because the general result of tying arteries in the midst of sloughing parts is that hæmorrhage takes place very soon again. If bromine has the power of arresting this sloughing process, it is a fact well worthy of our investigation.

Dr. Post, in conclusion, alluded to the good effects claimed by the surgeons for bromine in cases of diphtheria and erysipelas. In the "Park Barracks," in Louisville, erysipelas broke out with great severity, and the moment that the bromine treatment was introduced the disease ceased to spread. The remedy was used both in fumigation and as a local application. The surgeons were in the habit of moistening lint with the compound solution of bromine and applying it directly to the part, and covering the whole with oiled-silk. Dr. Post saw a number of cases treated in that way where improvement had taken place in a very short time. He was informed by those gentlemen who had charge of the erysipelatous hospital, that in almost all cases, in from twelve to twenty-four hours after the commencement of the treatment, the erysipelas began to subside. It scarcely in any case continued to spread beyond two or three days; generally its spread was checked within from twelve to twenty-four hours.

Dr. Detmold alluded to the investigations of a distinguished German writer, who maintained that the deposit on the surface of hospital gangrene consisted of a multiplied cell growth, which, immediately on being formed, underwent destructive assimilation. He endorsed the treatment by the local application of nitric acid, and also enumerated several remedies which had proved of great efficiency in the treatment of the disease during the Italian campaign, as, for instance, the saturated solution of chloride of potash, cold tar, and tr. iodine.

Dr. Edward Jarvis, of Mass., by invitation, made a few remarks concerning the action of bromine as observed by him while on a tour of inspection through some of the cities visited by Dr. Post. He corroborated in the main the statements made by Dr. Post. In reference to the case spoken of by Dr. Post, where the tibial artery was ligated in the midst of sloughing tissue, he stated that he had seen the case on the 25th day, perfectly recovered. Dr. Jarvis had learned from Dr. Goldsmith that bromine affected only the dead tissue in cases of gangrene, and when applied to the skin the cuticle only was destroyed.

Dr. Percy stated that he had been in the habit of using the saturated solution of bromine for diphtheria, and with very satisfactory results. He had also used it with equally good effect in syphilitic ulceration of the throat and in tonsillitis. In conclusion, he alluded to the fact that Dr. Metcalfe had for some time been in the habit of using a combination of bromine and iodine in throat affections with great success.

The Academy then adjourned.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, March 25, 1863.

DR. H. B. SANDS, VICE-PRESIDENT, IN THE CHAIR.

REPORT OF A REMARKABLE OBSTETRICAL CASE; VERSION; METRO-PERITONITIS; GANGRENE OF THE UTERUS; AUTOPSY.

Dr. F. D. Lent presented the following report:—

Mrs. E., aged 35. The husband of this patient applied to me on Monday, Feb. 23, 1863, in a state of great excitement, requesting my immediate attendance on his wife, who was in a dying condition. Upon reaching the house, which was near by, I learned the following particulars:—That Mrs. E., a person of strong constitution and previous good health, had been taken in labor with her fifth child on Friday evening, Feb. 20th. That is to say, the membranes ruptured at that time without any previous pain. On Saturday morning, Feb. 21st, she summoned a midwife, who found a hand presenting in the vagina, but, up to this time, no labor-pains. She continued in this state until about four o'clock P.M., when the midwife gave some drug, after which pains of a moderate character set in. Soon after this the patient, suspecting something wrong, sent her husband in haste for the nearest physician. He arrived at about six o'clock, and immediately proceeded to introduce his hand into the uterus. The patient had no anæsthetic, and states that he caused her intense pain, and that she felt his hand "high up in her stomach." After manipulating for some time, another physician whom he had sent for arrived, and, having administered chloroform to partial anæsthesia, proceeded to operate. After some attempts at version he desisted. These attempts were renewed at long intervals, until between twelve and one o'clock on Sunday morning, six hours and a half from the commencement of the operative procedures, when the child was turned and delivered. At about ten o'clock, however, while manipulating within the uterus, he succeeded in detaching and bringing away the placenta. The patient was never free from severe pain, or from the manifestations of it, from the commencement of the operation to the end, although anæsthetics and anodynes were administered to a certain extent.[*] On Sunday, Feb. 22d, the patient was in a suffering condition; her abdomen was swollen and tender; she was feeble and restless, and her lochia suppressed. On Sunday evening the physician in attendance gave her some anodyne, but she obtained little or no relief, and vomited occasionally. On Monday morning, Feb. 23d, her suffering had increased, but her medical attendant stated that she was doing better than could be expected, and left some anodyne draught to be given at certain intervals. It was about two hours after this that I was called in, and urged by the patient and her friends (having been for some years the family physician) to take charge of her. Having sent a notification of the facts to the previous attendant, I did so. Present condition, Feb. 23d.—Patient is lying on her back, with her knees drawn up towards the abdomen, and refusing the least change of position, the nurse having repeatedly attempted this in order to administer an enema. The tympanitis is very considerable, and the tenderness on pressure also—especially so over the pubes and right ovarian regions; countenance anxious; pulse frequent, feeble, and intermitting; skin dry; tongue inclined to dryness; thirst considerable; lochia suppressed: is vomiting profusely a yellowish fluid, which is ejected with but little effort. Took castor-oil yesterday, but has had no operation. Patient is crying out piteously for some relief from the abdominal pain. *Diagnosis.*—Metro-peritonitis. *Prognosis*—very unfavorable. Immediately administered a full dose of morphia by hypodermic injection, which soon induced quiet and a tendency to sleep; applied a large blister over the abdomen; and ordered an enema *per rectum* of morph., gr. ss., q. 3 h.; also nourishment in the shape of concentrated beef-tea, and a little egg-nogg. Feb. 24th.—Feels much better; vomiting has been arrested; has dozed a little; has less pain; pulse not much changed. Repeat hypodermic injection. To take pil. morph. sulph., gr. $\frac{1}{8}$, q. 3 h. Feb. 26th.—Seems rather better. It has been necessary to give the pills every two hours. She sleeps but little; the tympanitis has increased; pulse about 130, and less intermittent. Bowels have moved twice; vomited a fluid to-day which she described as having a decidedly stercoraceous smell and taste; no nausea since. Still lies in the same position. March 3d.—There has been no marked change in the condition of the patient since last date. The tympanitis has gradually increased; bowels have moved several times spontaneously; nothing remarkable in the appearance of the evacuations; she has passed water at all times without difficulty; pulse has varied from 130 to 140, feeble, has lost its intermitting character. The tenderness on pressure is now mostly confined to the lower part of the abdomen. It has been occasionally found necessary to increase the doses of morphia from gr. $\frac{1}{8}$ to gr. $\frac{1}{2}$. Has now poultices sprinkled with oil of turpentine over the abdomen, the blistered surface having healed. March 8th.—Has been rather failing; pulse 126; tympanitis the same; has had diarrhœa for some days, and has required frequent doses of tannic acid with the morphia. Takes her nourishment with some relish; sleeps but little. March 10th.—At three o'clock P.M. yesterday there was a gush of yellowish fluid *per vaginam* which had a putrid odor. This discharge is still considerable, and has rather a feculent odor. March 13th.—About the same; requires her anodynes only once in four to six hours. Bowels still open. The nurse states that for the last twenty-four hours the urine has been muddy and dark. It has the appearance of urine and feculent matter mingled, and, under the microscope, shows an abundance of large exudation corpuscles and large crystals of the triple phosphates. It is probably a mixture of the contents of the bladder and the vagina, the vaginal discharge still continuing abundant. Complains now of pain along the descending colon, extending to the umbilicus and spine. March 14th.—Sinking gradually. March 15th.—This morning her friends thought her better, but in the afternoon a bloody discharge in considerable quantity took place from the vagina, and she rapidly sank and died.

DEAR DOCTOR:—At your request we made a post-mortem examination of the body of Mrs. E., of which the following is a history written from notes made at the time:—

Autopsy, twenty-one hours after death, weather very cold.—Rigor mortis well marked. Body moderately emaciated. Abdomen markedly tympanitic. Percussion gave "dull resonance" (a muffled sound) over every region except the hypogastric, which was perfectly flat. On making the usual incision, it was found impossible to avoid wounding the intestines except by the greatest care, owing to the intimate adhesions of the intestines to one another, and to the abdominal walls. All the contents of the abdominal cavity, below the liver and stomach, were bound together in one solid mass; the intestines so firmly united that, in separating them, the peritoneal coat was invariably stripped off. The intestines presented a deep lead color, merging into a purplish brown, and all their coats were softened; so much so, that, in holding them out of the way by hooks, they would tear like brown paper. The muscular and mucous coats were nearly of their natural color, being, if anything, a little pale. Large quantities of light colored fæces were found throughout their length. About eight ounces of clots and a pint of serum were found in the hypogastrium, shut in by adhesions; another collection in right iliac fossa of about half the quantity. Small collections of fluid, looking like pus, found in various places. As usual in these cases, when submitted to the microscope, it proved to be fibrinous (granules, granular cells, spherical and elongated, and fibres). These same cells, spherical, constituted the bulk of the deposit in the urine, as you have mentioned in the history of the case. The *uterus* was so softened and bound down by adhesions, that it was with some difficulty discovered. When exposed, it appeared five or six times its normal size; its anterior surface of the same dark, gangrenous hue as the intestines. On its left border, anteriorly, was seen a ragged opening of about one inch and a half, involving also the vagina to the distance of one inch, making an opening of at least two and a half inches. The whole mass was removed and preserved in a cold place for further use. The anterior wall is gangrenous throughout, and much thinned; the whole internal surface is gangrenous; but the posterior wall appears otherwise unaffected, its peritoneal surface being intact. No incision was made into its substance. Other abdominal organs healthy.

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[*] These facts were partly ascertained by careful inquiry from the patient, nurse, and friends, and partly from the physicians.

P. C. Barker, M.D.,
William Young, M.D.

Cold Spring, March 17, 1863.

Dr. Clark.—There are two or three omissions in the report, which it would be desirable to have supplied before we could be quite sure as regards the nature of the opening. It is not stated, for instance, whether the opening was round or linear. Again, in regard to the clots, nothing is said of their appearance, in order to enable us to form a judgment as to their age.

Dr. Young, of Cold Spring, by invitation, stated that the opening was linear, and that the clots were of a very pale yellow color. He also remarked, in answer to a question from Dr. Clark, that the specimen was fœtid at the time it was removed from the body.

Dr. Clark.—There is no way of accounting for that rupture, except by assuming one of two suppositions—either it was an actual laceration at the time of delivery, or it was the result of a slough produced by the pressure of the child against the bones of the pelvis. The position of sloughs from this latter cause is more commonly anterior than lateral. In this case the point was midway between, but it is certainly not improbable that a slough might not have occurred in that situation. It would strike me, therefore, inasmuch as the symptoms of peritonitis occurred very soon after delivery, that there was a fair chance that the rupture might have occurred previous to the peritonitis, and consequently previous to the time that the slough would have been completed to produce a perforation.

Dr. Finnell remarked, that the uterus presented to him the appearance of one that had been ruptured for some considerable time previous to death.

Dr. Clark stated that another question came up in reference to the supposition that simple rupture was produced by manipulation during delivery, which was perhaps not easy to solve, viz. the occurrence of a slough anterior to the rupture. A simple rupture of the uterus was not usually attended by gangrene, any more than any similar wound in other parts of the body. Another feature in this case was interesting in regard to the treatment in the case, as it was evident to him that the peritonitis was substantially cured, and that such a result was brought about by the free use of opium.

The Society then adjourned.

American Medical Times.

SATURDAY, SEPTEMBER 12, 1863.

THE FREEDMEN OF THE SOUTH.

Among the grave social and political questions growing out of the present war, one is especially pressing itself forward for immediate solution. It is the present and future condition of the Freedmen of the South. A nation has, indeed, been born in a day. And it is a nation of infants, whose intellectual, social, religious, and even physical faculties are in an undeveloped condition, or even in a nascent state, without proper direction. History affords no more interesting example of the sudden deliverance of an oppressed and imbruted race from the hands of the oppressor. And this act has been accomplished without a solitary preparatory measure. Fresh from the fields of the taskmaster, untutored except in the vices of the most savage and debased life, accustomed to be the recipients of every imposition which the passions, prejudices, or selfishness of man can inflict, the Freedmen of the South lie helpless at the feet of the Government and people of the United States, mutely imploring their succor. What shall be the future social and civil condition of this people is a problem which can be solved with the utmost certainty, and the responsibility of its proper determination rests with the Government.

And it is gratifying to know that our Government, notwithstanding the pressure of the grave and important duties of state, is mindful of the wants of this humble class of persons, and has taken initiatory steps towards the practical establishment of their social and civil condition in their new relations. A Commission has been appointed, composed of eminent philanthropists, to inquire into the condition of the colored population emancipated by the President's proclamation and by acts of Congress, and to report what measures are necessary to place them in a condition of self-support and self-defence, with the least disturbance of the great industrial interests of the country. The proper basis of this inquiry is the vital statistics of the African race and the mulattoes, as well in the Northern and Middle as in the Southern States. In pursuit of this inquiry the Commission have issued the following series of questions, which are particularly directed to the medical profession :—

1. What is the number of the colored population of your town? 2. About how many pure blacks? 3. About how many mulattoes? 4. Does the colored population, if not recruited by immigration, increase or decrease? 5. Do mulattoes seem to you to have as much vital force to resist disease and destructive agencies as pure blacks, and as whites; and do they usually live as long? 6. To what diseases do mulattoes seem peculiarly liable? 7. Do mulatto families usually have as many children as white families? 8. Can you give instances within your own knowledge, of the number of children in one family born of, and reared to maturity by, mulatto parents? 9. Are the colored people generally industrious and self-supporting, or not? 10. How is it in the second generation with regard to the number and health of offspring? 11. Through how many generations has any family of mulattoes been known to persist? 12. Do the mulattoes seek public charity in greater or less proportion than whites? 13. Do you consider them, upon the whole, as valuable members of the community, or not?

It is surprising how little attention the vital statistics of the colored people have received in this or any other country. Although they enter largely into the population of many nations, few observations have been made upon their peculiarities, either social or physical. We know little of the effects of expatriation upon the African; of the influence of particular climates; of his hereditary tendencies to disease. We know as little definitely of the mulatto; of the influence of amalgamation in developing or deteriorating the different races; whether the mixed races are as fertile and as long lived, as the parent stock untainted. These and similar questions, if settled by indisputable facts, would now be of infinite value in determining the proper direction to be given to the efforts to elevate the freedmen. The failure to collect the vital statistics of the negro reflects the more severely upon the American statistician, because of the abundant facilities which he has had for this special study.

Unfortunately, in this country, too little attention has been given to vital statistics in general to render the study of the peculiarities of any particular class of persons a direct and simple task. But four or five States have attempted to carry out a system of registration, and, with two or almost three exceptions, these efforts have proved of little real advantage in determining the social or physical condition of the people. The decennial census brings together a large mass of ill-digested facts, which have too little precision, and are too general for our present purpose. There are many observations widely scattered, which, collected and properly collated, would throw much light on many of the questions above proposed. But in the absence of such collection, or of full vaccinate registration reports of the different States, the Commission must rely upon the efforts of individuals interested in this subject. To the medical profession they make the appeal more directly, because this department of research belongs peculiarly to our province. It is to be hoped that medical men so situated as to give correct replies to the several questions above proposed, will hasten to make full returns to the Secretary of the Commission, Dr. S. G. Howe, of this city.

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THE WEEK.

A report has recently been presented to the French Academy of Medicine, on Vivisections, of which the following are the conclusions:—

> "1. Vivisections are indispensable to physiology, and operations on living animals are necessary for learning the manœuvres of operative medicine in the veterinary art. 2. They should be undertaken with reserve, and the greatest care should be taken not to give them a character of apparent cruelty. 3. The experimenter should always have in view a real progress in science. 4. Students should not perform experiments except in the great centres of study, under the direction of the professors. 5. Every means at the disposal of science for the diminution of pain should be put into requisition by the experimenter."

The medical press of France and England oppose the practice of vivisections with strong and well considered arguments. A Paris journal says:—

> "Magendie, alas! performed experiments in public, and sadly too often at the College de France. I remember once, amongst other instances, the case of a poor dog the roots of whose spinal nerves he was about to expose. Twice did the dog, all bloody and mutilated, escape from his implacable knife; and twice did I see him put his fore legs around Magendie's neck and lick his face. I confess—laugh, Messieurs les Vivisecteurs, if you please—that I could not bear the sight. And again, alas! M. Cl. Bernard performs vivisections in public in his course of physiology. It is, indeed, true that Ph. Bérard, professor of physiology, never performed a single vivisection in his lectures, which were brilliant, elegant, and animated. But Bérard was an example of a singular psychological phenomenon. Towards the close of his life, so painful to him was the sight of blood and the exhibition of pain, that he gave up the practice of surgery, and would never allow his students to witness a vivisection. But Bérard was attacked by cerebral hæmorrhage, and the whole tone of his character was thereby afterwards changed. The benevolent man became aggressive; the tolerant man, irritable; the hesitating and doubtful man, resolute and positive. Moreover, he became an experimenter, and passed whole days in practising vivisections, taking pleasure in the cries, the blood, and the tortures of poor animals. Let us use, but not abuse, the practice."

The Academy of Medicine, after the usual recess of two months, will resume its meetings on Wednesday evening next, the 16th inst. From the ability and reputation of the gentlemen whose names have already been announced in connexion with the varied and interesting list of papers contained in the circular published in the Medical Times in July last, the profession may justly anticipate a profitable winter session. We hope the discussions will be more thorough than heretofore, as ample opportunity is given for preparation before each paper is read.

Among the recent changes in the Medical Department of the Army, we notice that Medical Inspector John M. Cuyler, U.S.A., has been placed in charge of the office of the Medical Inspector-General. Dr. Cuyler was formerly a Surgeon in the Army, and for a considerable period Medical Director of the Department of Eastern Virginia. He is a most capable and efficient officer, who has won the respect, esteem, and confidence of every one with whom he has had official relations. The management of the Bureau of Sanitary Inspection could not be intrusted to more worthy hands.

Reviews.

The History, Preparation, and Therapeutical Uses of the Citro-Ammoniacal Pyrophosphate of Iron, named in brief Pyrophosphate of Iron. By E. N. Chapman, A.M., M.D., Professor of Therapeutics and Materia Medica, Professor of Clinical Obstetrics, and Physician in the Long Island College Hospital. (Reprinted from the Boston Medical and Surgical Journal.) Pp. 12.

In this pamphlet Prof. Chapman gives us an interesting sketch of an inquiry into the chemical and therapeutical properties of pyrophosphate of iron. The preparation which he employed was obtained as a gelatinous precipitate in the reaction between the pyrophosphate of soda and the tersulphate of iron in solution. A given proportion of citric acid in solution is neutralized by liquor ammoniæ, as shown by test-paper, when the pyrophosphate is added, and the liquid boiled until the salt is dissolved, which gives the citro-ammoniacal pyrophosphate of iron in solution; from which we may obtain the solid salt by evaporating to a thick consistency, and then spreading the product on large plates of glass. In his opinion the citro-ammoniacal pyrophosphate of iron affords certain marked advantages over the preparations of iron hitherto in use. Its tastelessness, in solution with sugar, and elegant appearance, in our day, when the nauseous doses of the older practitioners will not be tolerated, are important items in the case of children, or adults even, when the employment of a remedy is demanded for a period of time. He notices a marked peculiarity in the pyrophosphate of iron to be the fact that it will scarcely ever in any case disagree, and very frequently patients who cannot tolerate the ordinary forms of iron will bear this well, and receive great benefit from its use. Like the others, it may fail to add to the blood a richer pabulum, from some fault in the vital processes of nutrition; yet, unlike these, it will not aggravate the disorder for the relief of which it was given.

Another and more important property of this preparation is the pyrophosphoric acid which furnishes the phosphorus to the blood. Phosphorus is now known to be a constituent of the nervous centres, and hence it becomes an important remedy in certain diseases. Prof. C. says:—

> "In many conditions occurring in disease there might be a lack of this constituent, in a due proportion; precisely as there is of iron in anæmic states of the blood, when our only resource would be to present it in some assimilable form to the system, as there are no substitutes for the elementary bodies. In the case of phosphorus, here has always lain the difficulty; under-

going a slow oxidation or combustion at ordinary temperatures, even when floating on water, its substance would be burnt in the stomach, and a small particle adhering to the mucous surface would occasion irritation or inflammation. It could not be absorbed as phosphorus, and could only be remedial by the phosphorus and phosphoric acids that are formed. These would undoubtedly combine in the stomach with earthy or alkaline bases, and be reduced to the state of the phosphates existing in the food. These, we know, suffer but little change in the blood, being found unchanged in all the solids and fluids, but particularly in the bones. From them, however, in normal, healthy nutrition, the phosphoric acid in the nerve-centres must be derived. Should there be a great depression of vital power, the acid is not liberated from its combination, in the same manner as we know the iron is not, from the materials for digestion. The iron set free by assimilation in the blood is appropriated by the hæmatin; the phosphorus by the brain-fat. In hydræmia we give the iron in an easily assimilated form—one that does not tax the vital powers in separating it from a chemical combination; and straightway the blood begins to regain its color, and strength and vigor are infused into every organ. When a certain stage of recuperation has been attained, as shown by a more florid blood and a stronger pulse, the iron will be readily appropriated from the food, which, normally, is the source whence it is always obtained. The fault, originally, lay not in the absence of iron in the substances presented to the blood, but in an imperfect elaborating power, which failed to assimilate it. In like manner, I think, phosphoric acid may, from the same defect, not be separated from its compounds, and thus the ganglionic nervous centres be wanting in their normal stimulus. Hence would arise many nervous and neuralgic diseases, and nervous complications in many forms of debility. It is necessary for us to pass the phosphoric acid into the blood. This we can only do by giving it in a saline state, with a base that would be assimilated, and thus set it free. This is accomplished by the iron, which we know, in ordinary medicinal doses, is used up in the blood; in other words, is appropriated by the hæmatin, and cannot be detected by any tests. It is a natural constituent in the red globules, and, consequently, not being foreign to the body, behaves precisely as any of the other elementary principles that form its structure. Strictly speaking, it is a food, and must be supplied as much as starch, sugar, oils, and flesh."

The clinical facts which Prof. Chapman records are embraced in the following extracts from the concluding pages of this interesting paper:—

"Whenever the blood becomes thin and watery, there are, almost invariably, troublesome attendant symptoms, seriously retarding the restoration of the patient to health. In all, there will be a lack of nerve-power, from the hydræmic state of the circulation. Hence, could we temporarily augment the stimulating properties of the blood, whilst we are administering the iron, we should prepare the way and present the conditions required for its assimilation, which otherwise might be impossible. Experience has taught most physicians this practical fact, and the indications have usually been fulfilled by the simultaneous use of wine and iron. We have found the pyrophosphate singularly appropriate under these circumstances, and as superior as a natural excitant must ever be over any substitute we may devise. Persons who have been over-worked by mental application and prostrated by disquietude and care, or persons who have a shattered nerve-power from some constant source of bodily suffering, have a thousand anomalous symptoms dependent on an imperfectly generated and distributed nerve-power; such as wakefulness, trembling, spasmodic movements, palpitations, etc. For this class of symptoms, the pyrophosphate of iron often affords relief in two or three days; and thus prepares the way for the ultimate cure that may be expected from the martial salts. Many times patients have expressed wonder at the calming and tranquillizing effects of the medicine; not only in mere functional aberrations and irregularities, but also in cases where actual disease existed in the nerve-centres. In both instances the stimulation is immediate and transient, and can be of no avail, excepting by removing irregular nervous distribution; whilst the iron is appropriated more readily by the organic forces now freed from a great source of disorder.

"In palpitation of the heart in anæmic subjects, I have seen many instances of the power of this remedy in removing this symptom long before the blood was restored to its normal condition. But palpitation, when not due to impoverished blood entirely, may be, oftentimes, equally amenable to this remedy.

"For all the varied and anomalous symptoms of hysterical patients, which are usually some phase of irregular distribution of the nervous influence, the pyrophosphate acts with singular efficiency, diffusing and equalizing the nerve-power, and thus secondarily restoring a more active capillary circulation and a more healthful play of all the functions. Cases illustrative of this point are unnecessary in the milder forms of nervous disease, since the claims of our remedy are sufficiently vindicated in the severer ones hitherto mentioned.

"The pyrophosphate of iron has another property scarcely to be anticipated; and one we should never discover except by actual observation. All of the common preparations of iron are apt to oppress the stomach, coat the tongue, and destroy the appetite; especially when the patient is much debilitated. Many, from a delicate, sensitive organization, cannot, under any circumstances, take iron with profit, it being, in their language, too heating. The pyrophosphate is friendly to the stomach, will never cause any irritation of the gastric surfaces, and, to our knowledge, has never disagreed with any patient, however incompatible the other forms may have been. Besides, it appears to possess a tonic power, and will restore the appetite and digestion after the failure of bitters, quinine, wine, etc., often in extreme cases of anæmia, amenorrhœa, and chlorosis, as we have witnessed in many instances in our obstetric clinique. It seemed to afford just the grade of stimulus required by the stomach; and the improvement thus initiated continued without interruption, under this single remedy, to the complete cure of the patients. This acceptability, friendliness, corrigent and roborant action of this form of iron on the digestive organs, is a valuable peculiarity which renders it, in many persons and in many states of disease, superior to all others, and perhaps to any drug whatsoever. Besides, its tastelessness, when dissolved in syrup, is a great recommendation in this age of sugar, when patients desire to die *sweetly*, and will not endure anything nauseous or unpleasant, though death be knocking at the door."

TRANSACTIONS OF THE MEDICAL ASSOCIATION OF SOUTHERN CENTRAL NEW YORK, at the 12th, 13th, 14th, and 15th Annual Meetings, held in 1858, '59, '60, and 1861. Binghamton: 1863. Pp. 79.

THIS Society has been one of the most active and useful medical organizations in this State. It embraces several of the southern tier of counties, and is purely scientific in its character. Its annual meetings are generally well attended, and the sessions are rendered interesting and instructive by the free interchange of opinion and the reading and discussion of papers. The papers in this pamphlet embrace those which have accumulated during four years, and consist principally of details of important cases occurring in the practice of individual members. We have space only to give the following contents:—Essay, "What are the advantages of this Association?" by H. S. West, M.D.; Cases of Cerebro-Spinal Meningitis, by C. M. Kingman, M.D.; Statistical Report on Obstetrics, by G. W. Bradford, M.D.; Amaurosis, as the result of an effusion of blood upon the Retina, by J. G. Orton, M.D.; Cases of Convulsions, by L. H. Allen, M.D.; A Unique Case, by J. C. Tappan, M.D.; Case of Caries of the Bones of the Ankle-Joint, by A. Baker, M.D.; Case of Puerperal Fever, by Geo. P. Cady, M.D.; Ovarian Disease, successful treatment by operation, by Silas West, M.D.; Radical Cure of Hernia, by E. G. Crafts, M.D.; Cerebro-Spinal Meningitis, by C. Green, M.D.; Lithotomy in the Female, by Daniel Holmes, M.D.; Extracts of Letter from H. S. West, M.D., of Sivas, Syria, Operations for Lithotomy and Strangulated Hernia; Case of Cerebro-Spinal Meningitis, by S. H. French, M.D.; Operation for Strangulated Hernia, by Fred'k Hyde, M.D.; Report on Obstetrics, by H. S. Chubbuck, M.D.; Case of Compound Comminuted Fracture of the Ankle Joint, by H. N. Eastman, M.D.; Ovarian Tumors, by P. B. Brooks, M.D.; Case of Encephaloid Disease of the Hip-Joint, by Daniel Holmes, M.D.; Cases of Encysted Tumors, by Nelson Nivison, M.D.; Medical and Surgical Statistics, registered by J. G. Orton, M.D., for 1860 and 1861.

Correspondence.

REMARKS ON AMPUTATIONS AND RESECTIONS IN GUNSHOT FRACTURES.[*]

[In a Letter to Prof. March.]

By A. H. HOFF, M.D.,

SURGEON-IN-CHARGE OF THE STEAMER D. A. JANEWAY.

The subject of resection and exsection is still receiving especial attention, and the more I see, the less favorably I am inclined towards them. The dangling arms, and necessary secondary amputations, are quite too numerous, and the results too unfortunate to recommend them. This may be, in a measure, the fault of the operators. Yet, I think there are sufficient reasons, aside from this, to condemn them. I have no doubt that there are suitable cases when operations of this kind would be preferable to amputations; but I am quite satisfied, so far as gunshot wounds are concerned, that but little success will attend them. I have had numbers of cases where these operations have been performed placed in my charge for transportation, and have had opportunities to compare results, and have always found those cases where there had been no surgical interference, and the simple treatment of an ordinary compound comminuted fracture had been adopted, much the most successful. The splintered bone is not *necessarily denuded* of its periosteum, and those portions that are will be disposed of; but at the same time, the repairing process will have commenced, and that peculiar *enveloping* process, welding together fragments, will go on *pari passu* with the destructive, and a well sustained system will soon demonstrate that nature is overcoming the evil. The dead substances are rejected, and new bone has cemented the separated portions, consolidating the shaft, and leaving, to our surprise, a very useful and partially movable joint, or in the continuity an almost perfect limb. Out of some forty cases of compound comminuted fractures of the thigh that I have received on board the boat, the majority of the cases totally unsupported, which were at once properly transported and transferred to the General Hospital in charge of Prof. Hodgen of St. Louis, nearly all recovered, with useful limbs, and the amputations and resections in almost every instance proved fatal; and the resections that did recover were much more tedious and productive of greater deformity. Fond as I am of operating, and much satisfaction as there is in a successful result, it will ill compare with the success in those cases, where studying closely the reparative powers of nature, with the proper applications to best assist, you save mutilation, demonstrating the value of surgery, instead of its destructiveness. I will inclose some drawings of wounds penetrating the shoulder-joint, with the means made use of in fracture for their support. The same apparatus I make use of in fracture of the arm, and find it is the most comfortable one, even in exsection of the elbow-joint. It supports from the neck and shoulder, differing from certain others by supporting instead of extending. It can be applied easily, and be made from a crotched stick; and the immediate support thus obtained is of great importance as to result, and a great comfort to the wounded man, who, instead of being obliged to walk with the broken fragments grating against each other and lacerating the tissue until, fainting from agony, he becomes exhausted and falls to the ground, to be rudely dragged on a stretcher or lifted into a rough jolting wagon, thus destroying all chances, I might almost say of life, is enabled to walk with comfort, saving that terrible inflammatory action which with its results would so much increase the severity of the case. "*A good stout jack-knife and a little ingenuity are all that are required.*" Excuse this little burst, but it brings up a subject of vast importance which is shamefully neglected, viz. the proper support of fractures. The support of a fracture on the field is an unheard-of thing, but an amputation an everyday occurrence. It is easier to cut it off than support it; the operation shows skill, nerve, etc. etc., but to support a limb and try to save it savors too much of the "afraid to operate." If support has to be followed by an amputation, the amount of suffering saved by it would add to the chances of recovery. Experience shows amputation of thighs to be very unfortunate, and proper support on the other hand exceedingly successful. Neglect in this particular seems strange, as the greatest care has always been recommended in reference to moving persons with fracture, more particularly of the lower extremity. In the excitement of battle many things are neglected, groans are unheeded even by the surgeon. From my experience there is no necessity for this neglect, but it seems that, with the exception of those cases requiring operations, all are neglected or reserved for some future time. From this neglect the future is a most critical one for the sufferer. In reference to the best method of amputation, I would say that I have noticed that you always made flaps, and I take it for granted that you prefer them. I have changed my mind, however, after making some forty amputations, and very much prefer the circular. It makes an easier stump to dress, and as most of these men have to be transported soon after the operation, a much more comfortable one to handle. The surface exposed is not so great, and a more dependent opening can be maintained. The suppuration is less, and the patient not so likely to suffer from pyæmia. My circular operations have done much better than the flap, and have made better stumps.

U.S. Hospital Steamer D. A. Janeway,
Near Vicksburg, February 18, 1853.

Army Medical Intelligence.

ORDERS, CHANGES, &c.

During his absence, and until further orders, Surgeon-General Hammond is relieved from the charge of the Bureau of the Surgeon-General at Washington, and Surgeon J. R. Smith is assigned to duty therein as Acting Surgeon-General.

Assistant-Surgeon Samuel Adams, U.S.A., has been ordered to report in person without delay to Surgeon-General W. A. Hammond, to accompany him to Hilton Head, Headquarters S. C., and the Department of the Gulf.

Surgeon F. G. Snelling, U.S.V., late Medical Director 18th Army Corps, is on leave of absence in New York city.

The Army Medical Board convened last week in New York city for the examination of candidates for appointment as Surgeons and Assistant-Surgeons to regiments of colored troops, has been adjourned, in consequence of the members having been ordered elsewhere.

Surgeon J. H. Grove, U.S.V., has been relieved from charge of General Hospital, Jefferson Barracks, and assigned to duty at General Hospital, Benton Barracks, Mo.

Surgeon William Varian, U.S.V., has been relieved from duty as Medical Director, District of the Cumberland, and assigned to the charge of the General Field-Hospital, at Cowan, Tenn.

Surgeon J. V. Z. Blaney, U.S.V., has been assigned to duty as Superintendent of Hospitals on the Peninsula.

Assistant-Surgeon Roberts Bartholow, U.S.A., has been placed in charge of the Lincoln hospital, at Washington, D. C., relieving Assistant-Surgeon Harrison Allen, U.S.A., who remains on duty as executive officer.

Assistant-Surgeon Weisel, U.S.A., has been assigned to duty at the Conscript Camp, at Mason's Island, Washington, D. C.

The resignation of Assistant-Surgeon R. B. Cruice, U.S.A., has been accepted.

Leave of absence on surgeon's certificate of disability has been granted to Assistant-Surgeon W. S. Wilson, 155th Pennsylvania Vols., for thirty days, and to Acting Assistant-Surgeon J. C. Garland, U.S.A., for twenty days.

Surgeon T. P. Gibbons, U.S.V., has been honorably discharged the service of the United States, in conformity with General Orders No. 100, of 1863, from the War Department, he having been absent from duty over sixty days.

Surgeon A. E. Stocker, U.S.V., has been relieved from duty in charge of Chesapeake Hospital, Fort Monroe, Va., and Surgeon E. B. Dalton has been assigned to the charge thereof temporarily.

Surgeon D. B. Sturgeon, U.S.V., is out from Fort West, Arizona, on a scout against the Mimbres Apache Indians

Surgeon E. Y. Chase, U.S.V., has been relieved from duty at Fort Vancouver, W. T., and assigned to the expedition to Canon City, Oregon. Surgeon Christian has been assigned to Fort Vancouver.

The resignation of Dr. Frank H. Hamilton, U.S.A., Medical Inspector, has been accepted by the President, to take effect August 29, 1863.

Surgeon John L. Le Conto, U.S.V., has been appointed Medical Inspector, vice Hamilton, resigned.

Surgeon-General William A. Hammond, U.S.A., left Washington, D.C., for the Departments of the South and of the Gulf, on Sunday the 29th ult.

Original Lectures.

CYANOSIS.

By J. LEWIS SMITH, M.D,
PHYSICIAN TO THE ORPHAN HOME AND ASYLUM, LECTURER IN THE UNIVERSITY MED. COLLEGE.

[Being a Paper read before the N. Y. Academy of Medicine, February 18 and March 4, 1863.]

PART II.

In severe cases of cyanosis the generative system is imperfectly developed. In the female, menstruation is scanty or delayed, and in the male the signs of puberty are feebly manifest. If the disease is so mild that the symptoms are absent when the patient is in a state of repose, these organs attain nearly or quite their normal development. The catamenia have appeared as early as the age of sixteen years; and a cyanotic patient treated by Cherrier, had two children, but they both died of scrofulous affections.

The action of the heart is necessarily much affected. In mild forms of the disease, if the patient is quiet, this organ may beat with considerable slowness and regularity, but in all cases exercise or excitement, which in a state of health would scarcely have any appreciable effect on the pulse, embarrasses its movements, and produces palpitation. In severe cases palpitation is rarely absent, and the pulse is frequent, feeble, and often intermittent.

The respiration corresponds with the action of the heart. It is accelerated in proportion to the frequency of the pulse. The suffering in this disease is largely due to paroxysms of palpitation and dyspnœa. These occur sometimes without any apparent exciting cause, and when the patient is quiet, but they are commonly induced by those causes which we have already mentioned as aggravating the symptoms of cyanosis. They come on suddenly, and are attended by increase of lividity, distension of the jugulars, and sometimes of the cutaneous veins, and by a sensation of present suffocation. They last only a few minutes, and are succeeded by great depression of the vital powers. In infants, on account of greater nervous irritability, and feebler power of endurance, these paroxysms generally end in convulsions, which occasionally are fatal. A cough is sometimes present, but it is usually slight.

Pain is not a common symptom. Some of the patients complained occasionally of headache, with or without vertigo, and occasionally some of pain in the chest, but it is uncertain to what extent or whether these symptoms were dependent on the cyanotic disease. The secretions do not appear to be affected so far as has been ascertained. The same may be said of the intellectual and moral faculties. In a case related by Dr. Chevers, the child was even said to be precocious (Lond. Med. Gaz. vol. xxxviii.). The mind is capable of steady application and acquisition, as in a state of health, provided the emotions are not suddenly excited.

There is said to be a tendency in this disease to hæmorrhage, but this liability, if we may judge from recorded cases, appears to be greater in youth and adult life than in infancy. In two cases in the collection blood was vomited, in one passed by stool, in one it escaped from the gums, in two from the mouth, in eight from the nostrils, and in sixteen it was expectorated. Pulmonary phthisis was, however, usually present in these last cases. In the Western Journal of Medicine, for 1829, an interesting case is described by Dr. Wm. M. Voris of a girl, nine years old, in whom hæmorrhage occurred under the scalp, producing great tumefaction, and nearly closing the eyelids. An incision was made, from which a pint and a half of dark blood escaped, and it was estimated that more than half a gallon was lost during the ensuing two weeks, at the expiration of which time the incision closed. The patient recovered from the hæmorrhage but not from the cyanosis.

Towards the close of life there is occasionally more or less anasarca, especially around the ankles, sometimes in the eyelids and face, and rarely to a certain extent over the whole body. In some patients it co-exists with effusion in the serous cavities.

It is evident a person affected with the severer form of cyanosis is disqualified for the duties of active life. The sports of childhood and the useful labors of mature years require an exertion for which he is physically unfit. He has not the ability even to engage in animated conversation, for he is overcome by emotions, whether of joy or sorrow. He lives almost an idle spectator of the world around him, prevented by his infirmity from engaging in its scenes.

Intercurrent diseases, especially those of childhood, are badly tolerated; but hooping-cough is the one which these patients are especially ill fitted to endure. Still, they sometimes pass safely, not only through hooping-cough, but through some of the most dangerous febrile diseases. It is a question of great interest, but about which little is known with certainty, whether these intercurrent affections are influenced by the cyanotic or venous condition of the blood. The symptoms of these affections are no doubt more alarming, mainly on account of the embarrassed action of the heart, and not on account of the state of the blood; still, it is reasonable to suppose that malignant and asthenic diseases are rendered worse by the lack of oxygen, and excess of the carbonaceous element in the circulating fluid.

Probably cyanosis does not furnish immunity from any other disease, although this statement has been made by a high authority. Rokitansky says, "*All forms of cyanosis, or rather all the diseases of the heart, great vessels, and lungs, adapted to produce cyanosis, in a greater or less degree, cannot co-exist with tuberculosis. Cyanosis affords a complete protection against it, and in this circumstance may be found an explanation of the immunity from tuberculosis which many conditions of the system, apparently very different in their character, afford.*" (*Handb. der Pathol. Anat., II. Bd.*) This statement of the Vienna Pathologist, so authoritatively expressed, is instructive, as showing how erroneous opinions may arise from a limited observation of cases. So far from its being true, the low degree of vitality in cyanosis does indeed appear to favor tubercular deposition. I have records of twenty-six cases of cyanosis in which tuberculosis was also present, in several of which the lungs contained cavities. This is about thirteen per cent. of the whole number in my collection—a large proportion, since so many die in infancy, at which period tubercles are not apt to be deposited. Cyanosis appears, also, to favor the development of cerebral diseases, especially congestion and coma, as will be seen presently.

The age which patients with this disease attain has been made the subject of statistical inquiry by Aberle. He states that in an aggregate of 159 cases, 57, or 35 per cent., died before the end of the first year; 108, or more than two-thirds, died before the age of eleven years; 30 between the ages of 11 and 25 years; and of the remaining 21, five only lived more than 45 years.

The age at which death occurred is given in 186 of the cases collected by myself, as follows:—

In 17 under the age of 1 week.
" 10 from 1 week to 1 month.
" 12 " 1 month to 3 months.
" 11 " 3 months to 6 months.
" 17 " 6 " to 12 "
" 12 " 1 year to 2 years.
" 21 " 2 years to 5 "
" 21 " 5 " " 10 "
" 41 " 10 " " 20 "
" 20 " 20 " " 40 "
" 4 over 40 "

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Sixty-seven, then, or more than one-third, died before the close of the first year; 121, or more than three-fifths, before the age of ten years; only 24 survived the age of twenty years, and four the age of forty years. Of course, the duration of life depends on the nature and extent of the malformations. Some of these are such as render a speedy death inevitable.

The mode of death is recorded in ninety-five cases, as follows:

19 died in a paroxysm of dyspnœa.
10 “ suddenly (the exact manner not stated.)
14 “ in convulsions (infants).
2 “ of apoplexy.
7 “ from hæmorrhage.
6 “ of phthisis (though, as we have seen, twenty others had this disease).
2 “ of exhaustion, without hæmorrhage.
10 “ of coma.
2 “ of abscesses in the brain.
1 “ of each of the following diseases: cerebral irritation, congestion of brain, effusion in the cranial cavity, acute hydrocephalus, paralysis from acute softening of the brain, dysentery, inflammation of heart, syncope, mucus in the air-passages, thoracic inflammation, choleraic diarrhœa, pneumonia, bronchitis, scarlet fever, croup. One died in trying to walk, one after a violent cough in pertussis, one after a long agony, one after an agony of ten or eleven hours; one is stated to have died gradually, and three quietly.

The ten who are stated to have died suddenly, probably died in paroxysms of palpitation and dyspnœa, which, we have seen, are easily excited and of common occurrence in cyanosis. If so, this was the mode of death in twenty-nine cases. Infants, with few exceptions, so far as appears from the records, died in convulsions. Nineteen patients died of cerebral affections, exclusive of convulsions, and in thirteen of these death was from congestion, apoplexy, or coma. The hæmorrhage of which seven died was probably, in most instances, dependent on phthisis, and six are said to have died directly of phthisis. We may, then, regard paroxysms of palpitation and dyspnœa, convulsions, congestive affections of the brain, and phthisis, as common modes or causes of death in cyanosis.

The nature of the malformations on which cyanosis depended is accurately described in the records of 164 cases. In the remaining twenty-seven, three were living at the time their histories were published. The remaining twenty-four were examined after death, but the examinations were too meagrely reported to answer the purpose of statistics. In ninety-seven of the 164 cases the malformation was similar in its nature, though differing greatly in degree in different patients. The essential or leading feature of this malformation may be expressed in the following terms:—

Pulmonary Artery Absent, Rudimentary, Impervious, or Partially Obstructed.

	No.	Sex.	Age.
Case	1.		15 days.
“	2.	M.	15 mos.
“	3.	M.	23 years.
“	4.		6 weeks.
“	5.	F.	12 years.
“	6.		4 mos.
“	7.	F.	5 mos.
“	8.	M.	1 year.
“	9.		5 weeks.
“	10.	M.	7 days.
“	11.	F.	9 mos.
“	12.	F.	11 mos.
“	13.	M.	13 days.
“	14.	M.	13 mos.
“	15.	F.	23 days.
“	16.	M.	18 mos.
“	17.	M.	9 years.
“	18.		8 months.
Case	19.		6 weeks.
“	20.		5½ months.
“	21.	M.	14 years.
“	22.	M.	21 “
“	23.	F.	2½ years.
“	24.	M.	18 years.
“	25.	F.	40 “
“	26.		2 yrs. 5 mos.
“	27.	M.	5¾ years.
“	28.	F.	7 “
“	29.	M.	8 “
“	30.		2 weeks.
“	31.	M.	40 years.
“	32.	M.	5 yrs. 10 mos.
“	33.	F.	3 years.
“	34.	M.	16 “
“	35.		5 “
“	36.	M.	4 “
Case	37.		1 year.
“	38.		4½ hours.
“	39.	F.	13 mos.
“	40.	M.	4 years.
“	41.	M.	13 “
“	42.	M.	20 “
“	43.		18 “
“	44.		17 months.
“	45.	M.	6½ years.
“	46.	F.	19 “
“	47.	M.	9½ “
“	48.		14 “
“	49.	M.	6 months.
“	50.	F.	6½ years.
“	51.		4 “
“	52.	F.	11 “
“	53.	M.	3 “
“	54.		
“	55.	M.	21 “
“	56.	M.	25 “
“	57.		6 “
“	58.		6 “
“	59.		10 months.
“	60.		11½ “
“	61.	M.	2 “
“	62.	M.	20 years.
“	63.		4 “
“	64.	M.	14 “
“	65.	M.	2 “
“	66.	F.	17 “
“	67.	M.	13½ “
Case	68.	M.	13 years.
“	69.	F.	16 “
“	70.	F.	8 “
“	71.	F.	21 “
“	72.	F.	12 “
“	73.	F.	9½ “
“	74.	M.	7 weeks.
“	75.	M.	
“	76.	M.	13½ years.
“	77.	M.	3 “
“	78.		11 “
“	79.	M.	10 months.
“	80.		13 years.
“	81.	M.	6 “
“	82.		1 to 2 weeks.
“	83.	M.	23 years.
“	84.	M.	13 “
“	85.	M.	6 “
“	86.	F.	17 “
“	87.	M.	19 “
“	88.	M.	34 “
“	89.	F.	15 “
“	90.	M.	18 “
“	91.	M.	13¾ “
“	92.	F.	6 months.
“	93.	M.	5 “
“	94.	F.	8 years.
“	95.	F.	4 “
“	96.		29 “
“	97.*		

In the first twenty cases in the above table the pulmonary artery was either absent or impervious. In the remaining seventy-seven this vessel was pervious, although admitting but a small quantity of blood. Occasionally, the entire artery was so small as to be properly considered rudimentary, and when so it was sometimes pervious, sometimes impervious, so as to resemble a slender cord. But in by far the largest number of specimens, the obstruction was wholly in the ventricular end of the artery, while the distal portion or the portion next the bifurcation was in nearly or quite its normal state. In no specimen was there obstruction in the remote end of the artery, while the part adjoining the ventricle was well formed and free from obstruction.

In eleven of the cases in this malformation the obstruction was due to adhesion of the semilunar nerves, the lines indicating the margin of the valves being still visible. A sort of diaphragm was thus formed with a central opening. Sometimes this diaphragm was elevated in the centre by the impulse of blood, so as to assume the appearance of a truncated cone. In a specimen examined by Dr. Wilks (No. 43) the adherent valves were funnel-shaped. In No. 93, in place of the valves was a thimble-shaped elevation, on which the lines showing the boundary of the segments, if any had existed, were effaced. In this specimen the artery was very small, and but a minute quantity of blood could have passed the obstruction.

In rare cases the obstacle was an adventitious membrane stretching across the artery, and entirely distinct from the valves. In one specimen (No. 17) the vessel was entirely closed by a dense fibrous membrane. In No. 25 a membrane perforated by a slit, crossed the artery above the valves. In a specimen examined by Louis (No. 56) the artery was obstructed by a “species of horizontal fibrous septum, perpendicular to the direction of the vessel, and pierced by an opening two and a half lines in diameter.” Although in some of the cases in which there was adhesion of the valves, or an adventitious membrane, there was also narrowing of the artery, this did not increase the obstruction; in other words, there was no point in the artery at which the calibre was so small as the central opening between the valves, or in the membrane.

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* Since this paper was written, the following additional cases of cyanosis have come to my knowledge:—One by Dr. Richardson, in the Lond. Med. Times and Gazette, Dec. 22, 1860; one by Sturrock in the Rigaer Beitr., iv. 2., Canst. vol. iv. page 12; and one by Mr. Barillier, Gaz. des Hôpitaux, March 2, 1861; but they throw no additional light on the nature of the disease. Two of these patients had tuberculosis.

In a large majority of cases, however, in this malformation, the obstruction was due to narrowing or contraction of the artery itself, not far from the valves. The specimen in which it was most remote from them, so far as can be determined from the records, for they do not always give its exact location, was No. 83, in which it was one inch above the valves, and was partially ossific. Usually the constricted portion contains only the normal tissues of the artery.

When there is great narrowing of the pulmonary artery at or near the valves, it is evident the latter cannot have their normal development. In no one of the twenty cases in which this vessel was impervious were these valves present, so far as appears from the records, even in a rudimentary state. In the remaining cases they were sometimes small and imperfect (Nos. 32, 37, 61, 70, 90); sometimes there were only two segments (Nos. 31, 37, 41, 44, 51, 52, 58, 62, 63), sometimes the valves were thickened (Nos. 34, 75, 76), and sometimes cartilaginous or ossified (Nos. 59, 88). In one specimen the valves were attached by their apices to the internal coat of the artery (No. 79); in one the obstruction was produced solely by vegetations attached to one of the valves, and not infrequently in other cases vegetations were found in the narrow part of the artery, reducing still more the calibre of the vessel.

In seventy-eight of the cases in this malformation the septum ventriculorum was incomplete. There was usually at the base of the septum a round aperture, sufficiently large to allow free communication between the ventricles. This aperture was always in the part of the septum nearest the aortic orifice. In one patient (No. 90) it was quadrilateral; occasionally, it embraced a considerable part of the septum, and in three the septum was nearly absent (Nos. 64, 65, 93). In five cases there was no communication between the ventricles, and in the remaining fourteen it is not stated whether the septum was complete or deficient. The circumference of the aperture was always smooth, and covered by the endocardium, showing that it was a malformation, and not the result of ulceration.

Original Communications.

MUTATION IN DISEASE.

By L. B. COTES, M.D.

BATAVIA, N. Y.

The remarks upon the "Causes of Modern Changes in the Art of Prescribing," in a late number of the Times, have induced me to communicate the following hypothesis, growing out of the fact of this change, and which, permit me to say, has very much helped me in my theory and practice for more than twenty years, besides affording me much satisfaction to be able, with it, to answer many questions, made by my patrons and others, in relation to the fact of these changes.

In the first place I will ask, why or wherefore is it that this change in the art of prescribing has been made?

Firstly, I answer, physiologically, that it is because the action, force, and diathesis of the human system under the influence of disease has changed; and secondly, pathologically, because diseases present different phases now from what they did half a century ago, particularly and emphatically those belonging to the class phlegmasia.

A secret influence in the air, earth, and water, which we can neither see, taste, nor handle, operates on and affects the animal economy in a diversity of ways, modifying and changing the character and form of disease at its pleasure, contending with the skill and ingenuity of man, and oftentimes baffling and conflicting with previously established rules and theories, sending forth new phases, and occasionally new maladies, or the return of one so long absent that its identity is hardly recognised. Throwing among us at one time epidemics or endemics, pneumonia, or scarlatina, or typhus fever, or dysentery, or spinal meningitis, its effects are so regular and general every returning autumn upon the mucous membrane of the air passages, that it has been said that hardly one in ten thousand escapes its influence, more or less, every year in some form.

It is evident then, from this and much more, that we are to study the operations of external nature as well as books; the enemy that surrounds us, the manner of his approach, and the nature of his attack; to understand even imperfectly the nature of disease, its "whys and wherefores," its forms and phases, and, with the help of these combined, to make a tolerable application and use of the science of therapeutics.

But what has this to do with mutation? Very much, as we may readily see, and which we will endeavor to consider in the sequel. If the atmosphere is so prolific with the fruits of disease as to be the source or vehicle of all our epidemics and endemics, how readily may we be led to suppose, and how reasonable the inference, that when an epidemic atmosphosis is established to a great extent, and long continued, its effects may be felt, and exerted upon all disease, more or less; so that when we have pneumonia in cold weather, or dysentery in warm weather, or typhoid fever in either, they may be materially modified by a radical change in the materials that engender them. Science does not, if it ever will, enable us, by analysis, to demonstrate the changes and show the peculiar qualities of this mysterious influence that resides in the air, earth, and water. The constituents of these we can analyse, separate, and demonstrate, but to that we cannot approach so familiarly; we are profoundly ignorant of it, except from its effects. In its effects we recognise a peculiar elective affinity in its operations, its positions, its location, etc., as, we may instance, the particular portion of the mucous membrane lining the air passages; sometimes attacking the first portion of that extensive surface, sometimes the last, and at other times some intermediate portion, the pharynx, larynx, trachea, or bronchia maintaining its integrity, perhaps, and continuing its operations at one time, and becoming diffused at another; and if we know nothing of this imponderable substance, except from its effects, with what jealous eye must we scrutinize its workings.

Prof. Watson says:—"Great epidemics leave traces of their operation long after they have ceased to prevail as epidemics, upon the health and vitality of a community."

Prof. Dunglison says:—"When a particular epidemic constitution of the air exists along with a favorable endemic condition, these combined influences may act in the causation of several of those serious and fatal complaints which at times visit a district, and are never afterwards met with, or at least not until after the lapse of a considerable period."

Here is (at least hinted at) a system of uniformity, an exactness, a regularity in the unseen laws and causes of disease that is mysterious and grand, and I wish we could say too little known, because too little studied.

Secondly. Is the treatment of disease that has of late assumed a new phase, the result alone of experience and investigation? Rather, did not the profession understand the nature of pneumonitis, pleuritis, and in fact all the class of phlegmasia half a century ago, as it presented itself then, as well as it does now? And did not the profession resort to the more frequent use of venesection, calomel, antimony, etc., with as much benefit then, nay, with as much imperative demand for the use of these agencies then, as there is for us to resort to the more modified treatment in this class of disease at the present period?

Theory.—When an epidemic atmosphere pervades any degree of latitude, the endemics that may appear within its circuit may be influenced or modified by it, and that influence will be felt commensurate with the space and time allotted for its action. We are living in, or just emerging, perhaps, from an epidemic atmosphere that has pervaded the whole of earth's surface; and how much are we to recognise in this the cause of this mutation and the consequent change in the treatment of disease other than "the present state of medical science and the resources of our pharmacopœia," or by "physiological investigations and pathological examinations," or by any "improved methods alone of diagnosis."

When epidemic cholera first made its appearance upon the earth, and we began to have accounts of it, no one supposed that it was to pervade the whole surface of the globe; but it began to travel, and the query arose—Will it reach the American continent? And after it had passed over this country the cholera atmosphere became a subject of remark; and although its effects were more prominently exhibited in localities where it found most nourishment, its presence was recognised by modifying and changing very much the form and violence of other diseases everywhere. And after a further lapse of time it began to be hinted that a change in the treatment of disease was going on, and still more specifically, that we do not bleed as much as formerly, we give tartarized antimony in smaller quantities; and it finally arrived to a point that these agencies are discarded entirely in pneumonitis and other inflammatory affections.

Prof. Watson, in his last edition of printed lectures, says, "Years have passed by since I have met with an instance of pneumonia which has required phlebotomy," and, I may say, he adds much the same of inflammatory diseases in general.

The distinguished M. Louis advocates that "Venesection has not now much control over the progress or the issue of pneumonia in any of its forms."

Prof. Jodin, of Dublin, recommends some of the preparations of iron for croup. Here we have English, French, and Irish authority; and upon this side we might introduce the testimony of Professors Flint, Rochester, Peaslee, Eastman of Owego, Doctor (I believe now Prof.) Bell, of Kings, Doct. Gibbs of Chetauque, and others.

I would not say with Dr. Hugh Bennet, that "antiphlogistic remedies, and bloodletting in particular, are unsuitable and even hurtful in all acute inflammations," butthat there is no doubt that the amount of these remedies once called for has very much diminished, and that it is in consequence of a very great change in the nature and form of disease; and that the best support for these premises is found by comparing the views, the theory, and the practice of the present time with what it was previous to the end of the first quarter of the present century.

Now, is not the true philosophy of all this to be found in the fact that, when Asiatic cholera had travelled round the earth, a peculiar constitutional atmosphere was or had been established,differingfrom what had existed before,and which has continued to the present time, modifying the character of disease? That the natural tendency of the atmosphere that we breathe is to predispose the human system to debility? That the powers of the system under the influence of disease are sooner exhausted, and generally require more artificial support from the inception of disease than formerly.

We all know the different treatment required in phlegmonous and erysipelatous inflammations. We are all acquainted with the different effects of the different temperatures which the rotation of the seasons produces. We have all witnessed the different states the blood is thrown into by different epidemics and diseases where the plastic tendency is elevated or depressed, bringing it to its highest point of sthenic elevation, or breaking it down to a non-coagulable state.

Now, the precise nature of the cholera diathesis is evidently to relax and depress rather than to elevate, so that, as far as it is capable of producing an influence upon other diseases, it has a downward tendency. Unlike other epidemics that have ever visited the earth, the cholera atmosphere, like the flood of old, has deluged the whole earth; and as long as its presence remains, so long will the present status of disease exist. But the eternal circle of nature may bring about other changes that will restore, perhaps, or eventuate in producing another diathesis that may call for a more liberal resort to the lancet, calomel, and antimony.

Homœopathy (Hahnemann's satire) and cholera are twin-sisters, so far as the period of their birth, longitude, and latitude, are concerned; but can the former claim any share in opening the eyes of the profession to a sense of its duties, or enlighten us upon the nature of disease, as to what it has been or is now? I must first be made to believe that the nature of pneumonitis, pleuritis, rheumatism, and all the class of acute inflammations, is the same now as half a century ago, and that the remedies we now use in this class would not have been like hot lead to the patient at that time; in fact, it would seem that the term *acute* is hardly or rarely to be applied at this time, but that subacute is more appropriate.

I would ask, in all candor, if, with the change that has been going on in the treatment of this class of disease, there has not been a corresponding change in the force and character of it? or are we to yield to empiricism all it claims in relation to this point? And as I perceive that it is being conceded by some that "our art is now emerging from a sad error," I would respectfully appeal to the profession for further views upon this interesting topic.

I am aware of the great improvements that are going on in the different branches of our profession, and desirous of its continuance; and I am equally anxious that the right causes should be attributed to the matters of fact connected with this particular subject.

CYSTIC SARCOMA OF THE BREAST.

By J. GRAFTON.

WATERTOWN, JEFFERSON CO., N. Y.

This form of disease, so well described by Sir A. Cooper, under the name of hydatid disease of the breast, is especially interesting to the surgeon from the fact that, although often mistaken for malignant disease, it has no malignancy in its nature, and is readily susceptible of cure.

The patient whose case I now record had suffered much from anxiety of mind engendered by the belief that she was the victim of cancer, *and this was all her suffering:* an excellent diagnostic point, not unimportant for physicians, as well as friends, to remember.

Notwithstanding the enormous size of the tumor, now measuring two feet in circumference, she has never yet experienced from it any pain; nor has it, as far as she is aware, perceptibly interfered with her general health.

The patient, Mrs. E. S. of Theresea, is married, 51 years of age, and still menstruating. Her general health is good, she is rather spare, but not much emaciated. There is no hereditary taint on either side of her own family. She has never injured her breast, has never suckled, being without children. The only malady to which she considers herself especially liable is erysipelas.

She does not remember exactly when the tumor she consults me about to-day commenced. When first noticed it was very small and hard, situated on the outer side of the right breast, on a level with the nipple, but not connected with it, oval in shape, deep-seated, and firmly fixed; if she has ever had any pain in it, it has only been of momentary duration.

Last year, one year from present date, Feb. 9th, 1863, the growth was about the size of a butternut; during the past ten months it has enlarged very rapidly, and is to-day twenty-four inches in circumference.

The general aspect of the tumor is unevenly globular, in some places very elastic, and evidently containing fluid; on the outer or axillary side more fleshy and dense. The cutaneous veins are much enlarged, surrounding the base, and running over the surface of the tumor in every direction. The position of the nipple and its general appearance are normal. The tumor appears to be freely movable on the pectoral muscle. The axillary glands are not enlarged.

The condition of the left breast is perfectly normal. Being perfectly well convinced of the cystic nature of the tumor, I did not think it necessary to use the exploring needle, as she was not then quite prepared to submit to the advice given—"*its immediate removal.*"

On the fourth of March, assisted by my very able friend Dr. F. Lowe of Pulaski, and Messrs. Davidson and Babcock of Theresea, I removed the tumor. The operation was perfectly simple and easy; two elliptical incisions through the integuments *below* and above the nipple, preserving sufficient covering for the exposed surface, being about all, as the tumor was readily peeled off from the surface of the pectoral muscle with the handle of the knife, being connected to it only by filamentous bands of cellular tissue. There was but little bleeding, one small vessel only at the inner angle of the wound requiring a ligature. Three sutures with intervening strips of adhesive plaster sufficed to keep the flaps in apposition. The arm was brought down and secured to the side. In three weeks the extensive wound had entirely healed, without an untoward symptom.

The tumor was composed of cysts and solid substance involving the whole of the gland, and weighed after its removal five lbs. and four ounces avoirdupois.

The large size which these tumors attain shows the importance of early interference in several cases that have come under my observation in their first stage. Free incision, evacuation of their cystic contents, and stuffing with dry lint when unable to draw out the cyst, have always effected a cure.

THE EXPULSION OF TÆNIA.

By CHAS. HASBROUCK, M.D.,

HACKENSACK, N. J.

For several years past reports of cases of tænia successfully treated with pumpkin-seeds have occasionally been published in the medical journals, and in some of these cases this simple remedy is said to have been employed with entire success, even after the failure of the spts. turpentine, kousso, and pomegranate, the medicines which have usually been relied upon in the treatment of this variety of intestinal worm.

It is very natural to suppose, from the enormous development of the tapeworm, and its apparent tenacity of life, that some powerful medicinal agent must necessarily be required for its expulsion from the intestinal canal; and, notwithstanding the published testimony in favor of the pumpkin-seeds, it seems almost incredible that anything so simple and harmless can yet be so destructive in its action upon this formidable parasite. Indeed, it is by no means improbable that physicians are sometimes influenced by this apparent disproportion between the gravity of the disease and the well known harmlessness of the proposed remedy, to overlook the pumpkin-seeds entirely in the treatment of tapeworm, and to employ instead some other agent, more energetic in its action upon the economy, but at the same time, perhaps, less efficient, and certainly less safe.

The following case, which recently came under my care, will serve to illustrate this tendency to neglect an excellent but innocent remedy, simply because it is innocent, and may also prove of some interest as affording additional evidence of the value of the pumpkin-seeds in the treatment of tapeworm.

Mrs. ———, about 45 years old, of vigorous constitution, and, until recently, of uniformly robust health, a year or two ago began to suffer with symptoms of indigestion, viz. inordinate appetite, furred tongue, irregular action of the bowels, and occasional attacks of colic. In February or March last she first noticed that she occasionally passed portions of tapeworm, generally in detached joints, sometimes in pieces of two or more joints. For this she consulted her family physician—a very intelligent and judicious practitioner—who at once prescribed the spts. turpentine in purgative doses. Being apprehensive that such large doses of the turpentine might prove injurious, she took the medicine in much smaller quantities than were directed, limiting herself to doses of a teaspoonful once or twice a day two or three days in the week. Under this treatment, which was continued for several weeks, she passed a larger number of single joints of the worm, and on two occasions, pieces of eighteen inches or two feet in length. But becoming discouraged at the slow progress of the cure, on the eighth of July last she consulted me. As I had never had an opportunity of testing the virtues of the pumpkin-seeds in tapeworm, I determined to do so in this case, and accordingly advised her to discontinue the turpentine for the present, and, after fasting for twenty-four hours, to take two ounces of the seeds—the pulp deprived of the rind grated with sugar, and mingled with half a pint of hot water—to be followed an hour afterwards by a dose of castor oil. She followed my directions strictly, and in less than two hours after taking the seeds passed a tapeworm nearly eight feet long.

That the result in the above case was due to the pumpkin-seeds, and not, as may perhaps be suggested, to the spts. turpentine that the patient had previously taken, is evident, I think, from the length of time that intervened between the discontinuance of the turpentine and the expulsion of the worm.

Mrs. ——— took a teaspoonful of the spts. turpentine an hour or two before I saw her on the morning of July 8th. She took none afterwards, intending to commence the treatment with the pumpkin-seeds immediately. The unexpected arrival of visitors, however, obliged her to postpone the use of the seeds until the 20th. On the 19th she abstained from food. On the morning of the 20th she took the pumpkin-seeds as directed, and an hour afterwards an ounce of castor oil. In less than half an hour after she passed a part of the worm, but in attempting to remove the whole, it broke. A few minutes later, with the second operation of the oil, she passed the remainder of the worm, *including its head.*

It will thus be seen that nearly a fortnight had elapsed after the last dose of the turpentine was taken when the tapeworm was expelled—a fact which, it seems to me, must preclude the idea of there being any relation between the two events as cause and effect. Besides, the worm still showed signs of life when first passed, a circumstance which, I apprehend, can scarcely be reconciled with the assumption that the spts. turpentine taken twelve days before was the efficient agent in the treatment.

The pumpkin-seeds employed in the case were the seeds of the common cheese or milk pumpkin, generally used in our county for culinary purposes, and cultivated by our farmers for the New York market.

During the thirty-one weeks ending the first day of August, no less than 1448 deaths have occurred from small-pox in the metropolis. Since 1843 the mortality has but twice been in excess of this amount for the whole year —in 1844 and 1848. The ratio of deaths to cases admitted with small-pox into the Small-pox and Vaccination Hospital from 1836 to 1851 inclusive, as recorded by Mr. Marson, was nearly 20 per cent. Assuming that the proportion of deaths to cases in the present epidemic has been 1 to 5, it would follow that upwards of 7000 persons have suffered from this most loathsome but most controllable malady in London within the past seven months.—*Lancet.*

Ovariotomy had been performed three times in Ireland, but never with success until last week, when Mr. Spencer Wells operated on a lady, fifty-five years of age, who has since progressed towards recovery in a most favorable manner.

Reports of Hospitals.

GEORGETOWN SEMINARY HOSPITAL.

By SURGEON DUCACHET, U.S.V., IN CHARGE.

GUNSHOT WOUNDS OF THE ABDOMEN—BALL BEING PASSED BY THE RECTUM.

Case I.—Lt. L. H. H——d, Co. H, 14th Indiana, aged 22 yrs., was admitted into this hospital May 6th, having been wounded May 3d at Chancellorsville by a conical ball, which entered an inch and a quarter below the umbilicus, and a quarter of an inch to the left of the median line.

The patient's account of himself was, that he had suffered but little pain from the wound, but had been troubled greatly with giddiness and nausea, with difficulty in passing his water. He had no passage from the bowels until the 5th, when the Surgeon-in-charge of the boat upon which he came to Washington, gave him a purgative, which acted naturally, and relieved all the symptoms but the difficulty in micturition. His appearance at the time of admission was good; there was no tenderness of the bowels, or tympanitis. On the morning of the 8th he complained of slight pain in the abdomen, and at 4 P.M. had a passage from the bowels, which was found to contain a minié ball, very much battered and out of shape. He continued from this time until the 20th to have a passage about once in six hours, with occasional attacks of vomiting, when he began to improve. The wound healed kindly, and he went to his home on the 12th of June on a leave of absence.

Case 2.—Corporal C. B. Lupton, of Co. B, 2d New York Cavalry, aged 20 yrs., was wounded near Rockville, Md., July 28th, 1863. The ball (a solid conical pistol-ball) entered from behind, and passing between the transverse processes of the 3d and 4th lumbar vertebræ, lodged within the cavity of the abdomen. The patient was admitted into the Georgetown Seminary Hospital on the afternoon of the day on which the injury was received, being much prostrated; had a high fever, and great tenderness of the abdomen, which was tympanitic. A mild purgative was administered, and a flaxseed poultice applied to the abdomen. The bowels moved twice on the morning of the 29th, after which he expressed himself as being very comfortable. On the 4th of August about 4 P.M. he passed the ball by stool; a slight diarrhœa followed for some days, with pain on passing his urine. About the 9th these symptoms began gradually to abate, and on the 27th of July he was transferred to another hospital, and has since gone home on leave of absence The treatment throughout consisted of a carefully regulated diet, rest, opiates, and fomentations to the bowels, as the symptoms demanded.

Reports of Societies.

KINGS COUNTY MEDICAL SOCIETY.

AN INTERESTING CASE OF BLACK VOMIT,

WITH DISCUSSION AS TO ITS ETIOLOGY.

[Presented to the Kings County Medical Society.]

By J. T. CONKLING, M D.

April 21st.—A seaman, aged 19, left New Brunswick in October last for Kingston, Jamaica. While there he had, he said, bilious fever, and was confined to the hospital several weeks. He remained on the island two weeks longer in a boarding-house, where his food consisted only of bread and salt fish. On the first of February he left in the barque John Bolton for Philadelphia, and, though very feeble, worked his passage during a voyage of eighteen days. From Philadelphia he came directly to this city, arriving here on Thursday morning, Feb. 19th. He partook of a breakfast of beef-steak and coffee, and at dinner, of corned beef and cabbage. In the evening he vomited, and had a restless night. His sister said she gave him on Friday salts and cream of tartar, which produced vomiting and purging. Friday evening, at seven o'clock, he commenced vomiting large quantities of dark fluid matter. I first saw him on Saturday morning, at three o'clock. He was suffering with severe pains in the bowels; had intense thirst; would drink a few swallows of water, and immediately vomit a pint or more of black fluid, which excoriated his throat and had a very acid odor; his pulse was natural; eye clear; and skin normal in color and temperature. His bladder was empty, and he told me he had passed urine the evening before. The vomiting continued during the day and following night. His mind remained clear. There was a constant restlessness and shifting of position in search of ease. There was no evacuation of urine or fæces after I saw him. His strength failed gradually, and he died at nine o'clock on Sunday morning, thirty-eight hours after the first occurrence of the dark vomited matter.

Drs. Enos and Bell saw him previous to death. The post-mortem and microscopical examinations were made by Dr. Speir. The following is Dr. Speir's report:—

Autopsy, seven hours after death.—Body well formed but emaciated; not yet cold; rigor mortis not well pronounced; surface tinged livid; frothy mucus filling the nostrils. The pectoral and abdominal muscles were of a very dark color, almost purple. *Thorax.*—Old adhesions at the posterior part of the left lung. Intense sanguineous engorgement of both lungs. Incisions made in any part of the lungs gave rise to an abundant flow of very dark-colored blood. The pericardium contained about an ounce of yellow serum. The heart was full-sized, firm, usual amount of fat; veins upon the surface distended with blood; the cut surface presented a darker hue than usual; intensely black clots in right ventricle and auricle; a very small light-colored clot in right ventricle, and a very small black clot in the left auricle; slight thickening of semilunar valves of aorta; otherwise valves perfect. *Abdomen.*—Liver very dark, between a purple and chocolate color; appeared normal in size; borders sharp and well defined; a few patches upon the anterior surface of a lighter color than the rest of the organ, having a slight yellow tint. The organ was firm; its cut surface was smooth, and, contrary to opinion based upon its dark color, it was dry, little or no blood making its appearance in the course of the knife. Its ducts were stained with yellow bile. *Stomach.*—Very large, extending down to umbilicus and into right lumbar region, and filled with two quarts of black fluid similar to that vomited by the patient; very acid odor; mucous membrane near the pylorus much congested and bared of mucus; the other portions were covered with thick mucus mixed with dirty black material like the vomita. *Duodenum.*—Filled with a similar black fluid; mucous membrane dark colored; not congested; intestines at some points much congested; they contained but little fæcal matter, of a yellow color, with only slight odor. Peyer's patches were healthy. The *spleen* was twice its normal size, of a dirty black color, and becoming diffluent. The *kidneys* were congested, nearly normal in size, and firm; their capsules firmly attached; cut surface smooth, dark colored, and soon covered by a layer of dark blood. The *supra-renal capsules* were of a dark color, their cortical and medullary substance not being well defined. The head of the *pancreas* was a little enlarged, otherwise normal. The *bladder* contained about four ounces of reddish urine. The *blood-vessels* contained but little blood, and that of dark color.

Microscopical and Chemical Examination.—The *black vomit* was very acid. Seen through the microscope with a power of about one-fourth of an inch, it was composed of a thin, transparent fluid, floating in which were found—striated muscular fibres (ingesta), altered starch corpuscles, a few oil globules, altered blood corpuscles, and numerous sarcinæ ventriculi, the whole field being covered with black amorphous granules, varying in size, and some of them aggregated together; many of them, on changing the illumination and focus, transmitted a deep red light. They were not acted upon when treated with acetic acid, but were dissolved by ammonia and liquor potassæ, giving a deep red color. They were considered to be granules of hæmatoidin. *Liver.*—Its cells were normal, with the usual amount of fat. A few cells were found in process of fatty degeneration; these were rare. *Amorphous granules* similar to those found in the black vomit were everywhere present, but less abundant than in the vomita. In some places the granules were fine, and gave to the field a yellow tint. A few crystals were found, probably so-called blood-crystals. *Heart.*—Muscular fibres perfect; granules of hæmatoidin present, but not abundant. *Kidneys.*—A few of the tubes were partially denuded of their epithelium; abundant granules of hæmatoidin; otherwise healthy. *Spleen.*—Considerably disintegrated; abundant granules of hæmatoidin; blood corpuscles much changed and broken down, being swollen, oblong, irregular, and granular. *Pancreas* healthy; contained a very few granules of hæmatoidin. *Supra-renal capsules* apparently healthy; granules of hæmatoidin more abundant than in pancreas. *Urine* albuminous; scales of epithelium from bladder and ureters; urate of ammonia, blood corpuscles, and granules of hæmatoidin.

The dark coloration of the tissues seemed to be due to the abundant granules of hæmatoidin, the shade of color depending upon the size, depth of color, and aggregation of the granules, the very fine ones giving a yellowish tint to the field of the microscope.

As the coloring matter of the bile (cholephyrrhine) is closely allied to hæmatoidin, it would seem possible for the latter, under certain circumstances, to give a yellow color to the skin and tissues, similar to that sometimes produced by the coloring matter of the bile, instead of the purplish color observed in this case.

REMARKS BY DR. A. N. BELL.

Dr. Bell stated that, besides having seen the case of fever reported by Dr. Conkling, he had also been privileged to assist in the post-mortem, and that, notwithstanding the unusual circumstances of climate and season, he thought the evidence conclusive that it was an uncomplicated case of yellow fever. The yellowness of the skin and the fawn color of the liver, which were absent in this case, though generally present in yellow fever, were by no means essential in the diagnosis, especially when we have, as in the case reported, the most pathognomonic of all the symptoms, *black vomit*, and the most pathognomonic of all the post-mortem appearances, *fatty degeneration of the liver.* And, in addition to these conditions, we also have a large quantity of "black vomit" in the stomach and intestines; a fluid blood, with broken-down corpuscles; an emptiness of the bloodvessels; an intensely congested and almost diffluent spleen—indeed, *all* of the most usual conditions of a rapidly fatal case of yellow fever. Dr. Bell also stated, in connexion with this case, that he had observed, in common with others who had had much experience in yellow fever in different climates, that it usually ran a more rapid course, and was more fatal in climates where it rarely occurred than where it is indigenous. He accounted for this by analogy: in that the organism of individuals attacked by it under such circumstances was deprived of the benefit of a gradual adjustment to the influence of the poison, on the same principle as that a vigorous bird speedily perishes in an atmosphere which will sustain one gradually brought under its influence for a much longer time. In such cases, too, we should expect to find a less perfect symptomatology and a less perfect degree of pathological lesion, as in the case under discussion. Yellowness of the skin, though a common symptom, is nevertheless frequently altogether absent. It rarely occurs in any case before the third day, on the decline of febrile excitement, and is usually regarded as the beginning of the second stage of the disease. Hence, in those cases which are fatal during the period of excitement, yellowness of the skin is commonly absent, or does not occur until after death. Fatty degeneration of the liver, also, in the case reported, seems to have but just commenced; and the liver, instead of being fawn color, as it probably would have been had the case been of longer duration, was just beginning to be so in spots. Whether fatty degeneration of the heart is consequent upon a still more protracted continuance of the disease, cannot as yet be made apparent. Prof. Riddell, of New Orleans, regards "molecular degeneration of the heart" as being a much more constant lesion than fatty degeneration of the liver. According to his (Dr. Bell's) experience the converse is the case. Of four cases examined microscopically last summer, in the Floating Hospital, they all had fatty degeneration of the liver, and one only molecular degeneration of the heart; that one died on the seventh day. Fatty degeneration of the heart is a comparatively recent discovery in yellow fever,* and *by the microscope only*, while the commonly present fawn-colored liver in this disease has for a long time *been supposed* to indicate a fatty degeneration of that organ. Pathologists of the present generation will hardly accept the proof of fatty liver on the mere presence of yellowness; or, on the other hand, regard the absence of this color as corresponding with the absence of this important lesion. The now universally acknowledged importance of the microscope applies to nothing with more force than to yellow fever, and, while it had been his opportunity to have passed through several epidemics of yellow fever, and to have made a large number of post-mortem examinations in this disease, its true lesions he had never, until recently, observed. It was his firm belief that the thorough and accurate delineation of this single case by Dr. Speir is of more value to the profession than all the experiences of a Chisholm. In conclusion, Dr. Bell read the following extract from a letter that he had received from Dr. La Roche, in reply to one that he had written to that distinguished authority regarding the history of this case:—

"The *John Bolton* entered on her voyage to Philadelphia on the nineteenth of January, at Porto Cabello, and, touching at Kingston, Jamaica, left that port on the second of February. She arrived in Philadelphia on the eighteenth of February, after a passage of sixteen days, and entered on the nineteenth. The Captain reports no sickness either in Porto Cabello or at Kingston, and the vessel had no sickness on board from the commencement of the voyage, and the officers and crew were all well when they were examined. The vessel cannot have been in foul condition when she reached Philadelphia. Had there been anything wrong about her, the Port Physician, Dr. Trenchard, who is a careful officer, would not have failed to report the fact to the Board of Health. From all this it would appear that the patient proceeded to Brooklyn on the very day of the visit of the Port Physician; that although he may have been ailing at the time of the examination, he was not sufficiently so to attract the attention of that officer; that he did not suffer from any poison generated or lurking in the vessel, since no one else on board, during the voyage or after the arrival of the vessel, was affected in like manner, or in any way approaching to it. Hence the case, supposing it to have been one of yellow fever—and on this point, I think, there can be no doubt, the absence of jaundice in so rapid an attack being a matter of not the smallest consequence—the case, I say, may very fairly be referred to a poisonous impregnation received at Porto Cabello, or perhaps more likely at Kingston. It is true, as the Captain reported, that 'no sickness prevailed in the harbor or on shore, or at either of the said places;' but it is well known that in tropical seaports the poison of yellow fever is never so effectually banished, however healthy the season may be considered,* as not to pounce upon some unlucky fellow peculiarly predisposed to its morbific influence. If I am not mistaken in what precedes, you have had before you an instance of rather long incubation—of thirty-one days—if the poison was received at Porto Cabello, and of nineteen days if the disease is to be traced to Kingston. I incline towards the latter view, inasmuch as we can hardly suppose that the poisoning took place on the very day of departure from either port, and a few days more would make the period of incubation from Porto Cabello too long, though such long periods, and even much longer ones, are not unknown, but they are comparatively rare."

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* 1858. Riddell, Microscopical Obs. pertaining to Yellow Fever.

(*To be Continued.*)

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, April 8, 1863.

DR. H. B. SANDS, VICE-PRESIDENT, IN THE CHAIR.

FRACTURE OF CERVIX FEMORIS.

Dr. Sayre presented a specimen of fracture of the neck of the thigh bone, which was removed at the post-mortem examination of a woman aged 87. Three years previous to death she caught her foot in the carpet, and fell heavily upon her right trochanter, causing the injury referred to. Dr. Sayre saw her very soon after the accident, and, considering her age, did not deem it worth while to make any strenuous efforts towards union. The limb was everted, and there was about an inch shortening.

The foot was merely supported on either side by sand-bags, and moderate extension kept up. In the course of two or three months she could raise her heel from the bed, and in six months' time was able to walk about, bearing the whole weight of the body upon the limb. She was enabled to walk from that time until her death without the use of a cane.

At the autopsy the fracture was found outside the capsular ligament, and apparently united. The line of fracture, however, was barred from view by a large amount of exostosis, which existed in the vicinity of the lesion. Dr. Sayre conceived the idea of boiling the specimen, as recommended by Dr. Geo. K. Smith, when to his surprise he found that no union had taken place, and that the head and neck of the bone were freely movable upon the shaft. The connective substance consisted of a glue-like material, which possessed the property of becoming very hard and firm on cooling and drying. The point of interest in the specimen consisted in proving the value of Dr. Smith's test by boiling.

BONY INTRA-UTERINE TUMOR.

Dr. Sayre also exhibited a uterus, removed from a woman aged 70, who died in the almshouse. The organ contained in its interior a bony tumor the size of a goose-egg, and during no time had any symptoms of its presence been complained of by the patient. There were also two or three fibrous tumors attached to the external surface of the organ.

CYSTIC TUMOR OF BROAD LIGAMENT.

Dr. Sands exhibited a cystic tumor of the broad ligament, removed by ovariotomy from a single woman, 35 years of age, a patient of St. Luke's Hospital. A gradual swelling of her abdomen commenced five years previously, unattended with any pain or constitutional disturbance. The menstrual function had never been interrupted. The amount of fluctuation over the abdomen was so great that at first it was supposed that there might be ascites. The tumor was movable to a certain degree during respiration, and there were no evidences of any adhesions. The uterus was low in the pelvis, the cervix being pushed down nearly to the vulva. The case being considered an exceedingly favorable one for at least an explorative operation, the consent of the patient was easily obtained. On the 30th of March last the operation was performed. An incision was made in the median line, about an inch below the umbilicus, and extending down for three inches. The hand being passed over the anterior and lateral surface of the tumor and detecting no adhesions, it was deemed best to proceed and extirpate the disease. Accordingly a trocar was introduced into the sac, drawing off nearly six gallons of a clear limpid saline fluid. This fluid, being examined by Dr. Dalton, was found to contain no albumen, and but a trace of organic matter. During the evacuation of the contents of the sac, the abdominal walls were so carefully compressed that no organ of the abdomen was seen except the uterus and the broad ligament, and those only for an instant. The tumor was found attached only to the broad ligament by a small pedicle. A double ligature was passed through the middle of the pedicle, tied on either side, and the pedicle cut off between. In thus dividing the pedicle, a small portion of the wall of the sac was left behind. After the removal of the tumor, the pedicle was brought through the abdominal opening, and secured in position by means of a large darning needle, and figure of-eight suture, after the manner of dressing hare-lip. The lower portion of the mass being inclined to draw backwards into the abdomen, its position was made secure by passing a strong ligature through it and through either lip of the wound. The remaining portion of the wound was closed by silver sutures, and a broad bandage and compress applied. The remaining portion of that day and evening the patient was quite comfortable, passing a tolerably good night with the aid of two doses of Squibb's liquor of opium. Her diet was farinaceous. On the day following, Tuesday, her pulse was good (73), and her skin was moist, though she complained of slight nausea, and presented a certain pallid aspect. There was no swelling or tympanitis, and she complained of no tenderness, only referring to a dull ache in her lumbar region. She passed a restless night. On Wednesday her pulse was 83, and nausea was still present. This night was alike a restless one, notwithstanding the pretty free use of anodynes. On Thursday her pulse was 120, but even then there was no tenderness on pressure, nor signs of tympanitis. Wine and opium were freely given, but she soon after began to sink, and during the night vomited some. On Friday the pulse was 140, and at nine o'clock P.M. she died.

The post-mortem examination was made the following day, and the cause of death was found to be universal inflammation of the peritoneum. A large quantity of plastic lymph was spread all over the intestines, agglutinating them together, over the under surface of the diaphragm, liver, uterus, and appendages, and abdominal walls. In addition to this, there was a large quantity of fluid sufficient to fill the cavity of the pelvis. This fluid contained pus. The more solid lymph, examined under the microscope, was found to be corpuscular. In the left broad ligament was found a cyst about two inches in diameter in process of development. It was entirely unconnected with the Fallopian tube or ovary. The stump of the pedicle of the large tumor was covered with healthy granulations. The uterus was very much enlarged by the presence of a fibrous tumor in the right half and posterior portion of the organ. This tumor could very readily be separated from the uterine tissue proper. The microscopical examination of the inner wall of the cyst showed it covered with epithelium of small size and of round oval shape.

The case was interesting in reference to the scarcity of symptoms attending so severe an attack of peritonitis, and also as an illustration of the great danger of opening the peritoneum under the most favorable circumstances.

Dr. Sayre remarked, that when the smallest quantity of air had been admitted into the peritoneal cavity, he did not see the reason for shutting it up by closing the wound in the abdominal walls so accurately. He would advocate the practice of leaving part of the wound open, in order to give exit to any confined air, and any subsequent exudations that might form. In this connexion he referred to the case recently presented by Dr. Peaslee, where, after ovariotomy, it was rendered necessary, on account of the accumulation of pus in the cavity of the peritoneum, not only to give an exit to it, but for a long time to make use of a syringe. In this case, whenever there was an accumulation of matter, there were symptoms of typhoid fever manifest, which in time always subsided after an evacuation of the offending matter. Whenever the first symptoms of peritonitis showed themselves, he thought it expedient to open the wound, inasmuch as no more mischief could be done by the admission of any more air, but, on the contrary, there would be a free exit for effusions.

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* Yellow fever existed at both Porto Cabello and Kingston last summer. A. N. B.

Dr. Sands considered such a plan of treatment a very dangerous one.

Dr. Krackowizer did not think that much air could enter the peritoneal cavity during an operation, inasmuch as the intestines had a tendency to float up to the opening and close it. He supposed that the danger of peritonitis was proportioned to the length of time the intestines were exposed to the action of the air during the operation, and not to any pent-up air in the cavity of the peritoneum itself. In Dr. Peaslee's case, if he recollected right, the typhoid symptoms came on a considerable time after the operation, and there were evidences of the presence of pus in the cavity.

The Society then adjourned.

American Medical Times.

SATURDAY, SEPTEMBER 19, 1863.

PROGRESS OF THE MEDICAL BUREAU.

The report has for some time been current that a commission has been appointed to examine into the management of the medical department of the army. Pending this investigation the Surgeon-General has been ordered to a distant service, and, as is customary, has been relieved temporarily of duty in the Medical Bureau.

Meantime, it will not be uninstructive to review the progress of the Medical Department during the administration of Surgeon-General Hammond. The appointment of Dr. Hammond as Surgeon-General was itself the first fruit of the reorganization of the medical department. The practice had become firmly established of selecting the senior member of the staff as the chief, when the place became vacant. But such vacancy rarely if ever occurred except by death, and hence it happened that the oldest members of the staff were always well advanced in years. The rebellion found the Surgeon-General's chair filled by an octogenarian, who had long been incapacitated by age. His successors must for all time necessarily have been men of sixty or upwards, unless an unusual mortality prevailed among the older members. There were senior surgeons who would have made experienced, active, and energetic officers. But this gigantic war found so many men of great age in important and responsible positions, requiring all the energy and endurance of middle life, that public opinion set strongly against the practice of allowing seniority to govern in the selection of heads of departments. Merit or special qualifications were strongly urged upon the authorities as the only safe rule in making such appointments. Influenced by this suggestion, the President selected Assistant-Surgeon Hammond for *Surgeon-General*, overlooking many capable senior surgeons who had labored faithfully in the public service for a lifetime. In every respect Dr. Hammond seemed eminently qualified for the position. Ten years of service in the staff had rendered him familiar with the detail of routine duties, and placed him in sympathy with the regular corps. Distinguished as a teacher in a prominent medical school, and with a world-wide reputation as a scientific medical writer, he was the best possible representative of the medical profession, and of the volunteer corps. To these were to be added ardent patriotism, the vigor of middle life, and powers of physical endurance equal to any necessary task. The appointment was generally received with unqualified favor.

On his accession to office the Surgeon-General at once set to work to give the greatest possible efficiency to the department. The field of its operations had gradually widened until it embraced a territory and detail hitherto unknown. The amount of labor thrown upon the Department at that moment was enormous. Immense armies scattered far and wide over the continent, and rapidly moving from point to point, were to be supplied with medical and hospital stores, and their hygienic condition to be constantly guarded. Sanguinary battles, occurring almost daily, required the utmost promptness and despatch to meet the great emergencies and supply the unavoidable waste of material. And, finally, a series of military hospitals was to be organized, and their management perfected on a scale hitherto entirely unknown in the history of war. To discharge the obligations which the war had imposed upon the department required not only rare executive abilities, and great energy in the chief officer, but it was of equal importance that administrative officers in every branch of the service should be honest, capable, and thoroughly qualified for the prompt dispatch of business. The internal changes in the staff necessary to effect these objects and put the machinery in proper working order, were effected with a bold hand, and necessarily created much ill feeling. Older surgeons, who had occupied prominent positions in time of peace, were succeeded by younger men, selected for their qualifications for special duties. Undoubtedly, in some of these changes, in a department so extensive, the right man was not always put in the right place, but of this there can be no doubt, viz. in his appointments to duty the Surgeon-General has aimed steadily to elevate the character of the Medical Staff of the Army, and to increase its efficiency.

In addition to the ordinary routine of the department the war imposed the necessity of creating a series of military hospitals. The selection of sites, the choice of architectural plans, the erection of the buildings, and the final appointment of all their internal arrangements, required skill and labor of a kind that, at that time, was scarcely attainable in this country. To this work the Surgeon-General gave much of his personal attention, and to his enlightened and persistent supervision the country is under lasting obligations. A system of military hospitals was gradually developed, extending along the Atlantic coast from Boston to New Orleans, and on the banks of the Mississippi and its tributaries, which is the admiration of every intelligent observer. Not only do they for the most part illustrate the latest improvements and suggestions of sanitary science in their construction, but in their management they are models of exactness in administration and of success in the treatment of disease. We believe this system of military hospitals, inaugurated and perfected by Surgeon-General

Hammond, will hereafter be referred to with just and honorable pride by the future historian of the war.

But passing by the general affairs of the department, we find that the Surgeon-General has been unceasing in his efforts to enlarge its usefulness, to elevate the professional character and tone of the staff, and to seize every opportunity to make the experience of the individual members subserve the cause of military medical and surgical science. Among his first acts was the reorganization of the Examining Boards, and raising the standard of qualification for admission to the regular and volunteer staffs. In this connexion we should mention the plan of an Army Medical School, to be located at Washington, which has been so far perfected as to have the first course of lectures arranged for this fall, and the lecturers selected. No rational and unprejudiced person can doubt that such a school, properly conducted, would give to the medical staff a much better qualified class of junior officers than can be obtained directly from the medical schools. The Surgeon-General followed the example of the British Government, which, after years of experience with scattered professorships, finally consolidated the several chairs, and formed the British Army Medical School.

The Army Medical Museum founded by Surgeon-General Hammond is an enterprise deserving of the highest praise. Already it begins to attract public as well as professional notice. It is now one of the richest collections in the world, illustrative of the surgery of war. The collection and preparation of materials for a future Medical and Surgical History of the War is another most important and meritorious undertaking. The materials for these volumes are very abundant, and of the most valuable kind. When completed, the history will illustrate the progress which the profession of the United States has made in military surgery. And we may add, no American surgeon need be ashamed of the record.

But we have not space to pursue this review further. The Medical Department of the U.S. army, in its efficiency, in the character of its officers, and in the detail of all its operations, surpasses that of any similar foreign organization. It has indeed received the most unqualified compliments from English army medical authorities. It has also the confidence of the general public to an extent rarely attained by the best medical organization. Of the circumstances which led to the appointment of this commission we are ignorant, but presume it is based on one of those idle rumors of fraud and corruption which are now so freely in circulation in regard to other departments of government. The result of this investigation is foreshadowed in the following paragraph from an influential and well informed daily journal, and we anticipate the early return of the Surgeon-General to the responsible duties of his office:—"It was admitted that Dr. Hammond had performed wonders in organizing and systematizing a medical bureau such as never before existed in this or any other country. It is true that the Secretary of War did, some six weeks ago, appoint a commission composed of Governor Reeder, Judge Hoard, and Major Barstow, to inquire into the condition and management of the Medical Bureau, and it had been whispered that in some particulars, not, however, affecting the efficiency of the Medical Department, censure to a slight degree might possibly be attached by this commission to the Surgeon-General or some of his subordinates; but everything adduced went to show that, so far as the appropriation for the purpose would admit, the wants of the sick and wounded of our armies had been supplied with most commendable promptness and completeness, both in the field and in the hospitals."

THE WEEK.

A French physician recently visited London, and on returning to Paris wrote an account of his visit. It is not surprising that he noticed particularly the English Hospitals, as contrasted with the French. He thus describes a London Hospital:

"The thing which first strikes one in these small Hospitals is the little appearance they make. No expensive plans have been adopted, and no architectural displays have been attempted, so that they look just like private houses—the English home or little fortress we have just been speaking about. But you no sooner cross the threshold than you recognise the comfort of these houses, the exterior having been evidently less regarded than the interior. Even within no luxury prevails, but everywhere the most exquisite cleanliness. Perfect ventilation is secured at a small cost by means of the large fireplace and the ease with which the windows may be lowered from the top at pleasure. The rooms contain from four to twelve small, simple beds, the floors and walls being kept very clean. On these latter, side by side with some pious texts, inculcating courage and resignation, are suspended coloured engravings, imitating water-colours, which are an eminently national taste, often representing country scenes upon which the patients may agreeably rest the eye, and cheer up their painful solitude. But above all, there are none of those sickly, sour, nauseous odours engendered by charpie impregnated with pus, the detention of cataplasms, the exhalations of privies, and the miasmata of large, ill-ventilated wards, which, even without seeing it, suffice in several of our large establishments to indicate the insalubrious air of a Hospital."

In the absence of the Surgeon-General the Medical Inspector-General Joseph K. Barnes is Acting Surgeon-General. Assistant-Surgeon Joseph R. Smith, who formerly held this position, is now in the Western Department. A Washington correspondent thus speaks of the present Acting Surgeon-General:—

"Medical Inspector Barnes is one of the very best officers in the service, who has had an experience of over twenty years in the army, having been greatly distinguished in the Florida and Mexican wars. He is one of the few army surgeons who have never allowed the laziness of camp life to interrupt their professional studies. He has kept *au courant* with the age, and is a gentleman acceptable in all senses."

Syphilis is a prevalent disease in the English army. A London contemporary says:—

"In the year 1859, no fewer than 422 men out of every 1000 were sent into Hospital suffering from syphilis and gonorrhœa, and 369 out of every 1000 in the following year. The ratio of admissions into Hospital per 1000 of mean strength of the Forces in the United Kingdom was—in the Dragoon Guards and Dragoons, in 1860, 356, in 1859, 402; in the Royal Artillery, 446 in the former year, 571 in the latter; in the Royal Engineers in the two years, 324 and 468 respectively; in the Military Train, 427 and 580; in the Foot Guards, 287 and 388; in the Infantry Regiments, 324 and 399."

We regret to notice that Prof. F. H. Hamilton has resigned his position as Medical Inspector U.S.A. From very many sources we have learned that his labors in the Army of the Cumberland have been invaluable. The service has far too few men of **Prof. H.**'s ability and devotion to duty, and the loss of such officers must be regarded as a public calamity. **Prof. Hamilton** will take up his residence in New York city, and engage again in general practice.

Reviews.

Gastrotomy.—Large Abdominal-Uterine Tumor, extirpated by John O'Reilly, M.D., F.R.C.S.I. [Reported by Richard J. Halton, L.R.C.S.I.] New York: pp. 8. 1863.

The subject of this operation was a married woman, about 55 years old, the mother of several children. The tumor first made its appearance seven years before, and so increased in size as to fill the abdomen; there was a good deal of emaciation, with œdema of the lower extremities. On examination, the tumor was found to be firmly fixed, but the parietes were movable slightly upon it. There was no evidence of fluctuation, but it was supposed, from its great elasticity before the operation, that it contained a number of cysts. As the patient was evidently sinking, Dr. O'Reilly determined to give her the chance of an operation. He prepared the patient by administering the night before the operation forty drops of laudanum to keep her bowels quiet and *contracted* during the operation. She slept well, and in the morning, just before the operation, her pulse was 144. The patient was brought under the influence of chloroform, and the following operation performed :—

> "The first incision was carried from the umbilicus to the pubes, and the integuments, muscles, and peritoneum, being divided, the tumor was brought into view, and Dr. O'Reilly made an attempt to introduce a trocar, but without success: he tried in another spot with the like result. Indeed, from its feel, it was evidently solid; so he prolonged the incision almost to the ensiform cartilage, and now the parietes, contracted at each side, left the tumor exposed. It hid the *viscera* altogether, and when it came to be lifted out it was found to be attached to the uterus, or rather the uterus was attached to it behind, and the fallopian tubes embraced it on either side. The lateral ligaments were closely attached to it; in fact, they formed an all but complete investment, for they stretched out on it apparently as the tumor increased. There was a great deal of difficulty in finding the exact attachments of the tumor, but the principal ones appeared to be from the third to the fourth lumbar *vertebra*, and then extending along the sacro-iliac synchondrosis of the righ side—how far down in the pelvis may be imagined when I mention the fact that I tied a vessel low down in the recto-uterine space: the attachments were partly torn through with the hand, partly cut. The principal vessel entered the tumor opposite the third lumbar vertebra, and was of considerable size; there were about six smaller ones: each was tied as it was divided; nevertheless, hæmorrhage from the numerous oozing-points was considerable. When the tumor was removed, the abdominal cavity (the lower part of it) was sponged out several times to remove the blood. The edges of the wound were brought together first by a deep metallic suture, twisted, embracing the soft parts external to the peritoneum; and by a common interrupted suture securing the integuments, sticking-plaster being applied in the intervals between the sutures; and finally a towel folded flat, a pad of tow, and a many-tailed bandage, completed the dressing, the two tails of the bandage being brought down under the thighs, up in front of the groin, and fastened there to guard against any slipping; and then the patient being thoroughly washed, and all traces of blood removed, was carried to bed."

It is stated that, "during the operation, all rules laid down in books on the subject were entirely disregarded. The window was kept open, admitting a free draught. The intestines were allowed to come out, and they were never touched until the operation being over, when they were all lifted in again." The tumor, described as "fatty fibro-cellular, displayed on section two large lobes of fat, intersected with fibrous bands, large sinuses (venous), connected by cellular tissue; it presented very much the appearance of a cow's udder, and weighed over *thirty pounds*." The after treatment of the patient was with large doses of opium. She progressed favorably until the seventh day, when she imprudently took a large dose of cream of tartar (three ounces), which produced excessive purging, prostration, and death.

Dr. O'Reilly makes the following remarks upon the operation :—

> "In performing the operation care should be taken not to stretch, lacerate, or injure the peritoneum by passing the pins or interrupted sutures through it. I must observe that the operators who employ the *clamp* cannot help *stretching* as well as *strangulating* the peritoneum. Sir A. Cooper, in a case where he tied the neck of the sac of a hernia, with a view to obliterate *it* and effect a radical cure of the hernia, was obliged to *untie* the ligature in consequence of the vomiting that ensued; it follows, therefore, that strangulation of any part of the peritoneum must be attended with bad consequences, as it induces mortification of the part implicated. Fine silk ligatures should be used in tying the vessels, and good care should be taken to *dissect* the peritoneum from the vessels before the ligatures are applied."

Correspondence.

CIRCULAR No. 6.

[To the Editor of the American Medical Times.]

Sir:—In no communication on the subject of the Surgeon-General's order, "excluding calomel and tartar emetic from the Supply Table," have I seen the results of any inquiries into the state of the sick in the army with reference to the abuse of these remedies; and I have thought it due to the profession in our country, and particularly to those glorious men of our profession in the army, to present the result of observations in the west and south-west, as obtained by the medical men here.

In the military hospitals of this city and vicinity we can give you positive data.

In 25,000 patients but nine cases of ptyalism have been seen; not a case of mercurial gangrene. In regard to other points, one can only make general statements, but founded on the best sources of information.

From Louisville, Western Virginia, the army of the Cumberland and Gen. Grant's army, the same relative statements are made. One of the most eminent medical gentlemen in Indiana told me that he had seen, some two months since, over 4000 patients in the hospitals of Memphis, Helena, Milliken's Bend, and Young's Point before Vicksburg, and not six cases of ptyalism. He saw a larger amount of scurvy, and it is this, doubtless, which the "political doctor" army inspectors have mistaken for mercurial stomatitis.

There are gentlemen here who have made extensive observations in eastern hospitals, and in those of the army of the Potomac as sanitary inspectors, who all concur in stating that they have seen no evidences whatever of the abuse of the condemned remedies.

The Surgeon-General states that *innumerable* cases of mercurial salivation and frequent cases of gangrene have been brought to his attention, and which has led him to strike the said articles from the "Supply Table."

It is due to science, it is due to the character of our profession, that he should publish the authors of those false statements, who have abused his confidence and attempted to degrade the American medical profession in the eyes of the world. This is another item, and alas that it has had such eminent authorization, upon which our enemies in Europe will seize, to prove that the state of medical science here is also an indication of a low civilization.

The medical men at home must stand by those who have made such sacrifices to go to the war; "they follow in the battle-field through the thickest of the fire, not to aid destruction in her work, but that they may staunch the wounds she makes," and they will scarcely be thought of in the triumph which the nation will offer to its successful warriors. Let us at least take care of their reputation so far as we are able. They feel this storm upon their reputation as intelligent men and readers of "modern pathology."

It is in proof here, that the Surgeon-General proclaimed himself against these remedies some years since, and it is therefore inferred that his order is more the result of a foregone conclusion than of official information.

If this is so, how improper is his course recently in attempting a series of ex-parte questions to obtain an approval of his order. Let me remind him of a line in Horace:—*Male verum examinat omnis corruptus judex.*

C. G. C.

Cincinnati, August 1, 1863.

HOMŒOPATHIC FRAUD.

[To the Editor of the American Medical Times.]

Sir:—I can heartily endorse your editorial remarks in your Journal of September 5th, regarding the surreptitious and fraudulent administration of the alkaloids and other powerful medicines by homœopathic practitioners. In proof of this charge, I may state that I have in my possession a homœopathic case of medicines, lately found by a friend in one of the streets of New York, and recently belonging to one of the leading practitioners in that line of quackery. One side of the case is filled with small phials containing powders, the other with tinctures. The phials are chiefly labelled with narrow strips of printed paper pasted around them, while a considerable number (not homœopathic) have the names of the medicines on the corks. The phials are all of the same size and appearance. Taking them in order, the labels read, "*platina*," "*hepar sulph.*," "*ferrum met.*," "*hyd. sub.*," "*graphitis*," "*magnesia carb.*," "*natrum mur.*," "*morphia*," "*cuprum met.*," "*spongia*," "*phosphorus*," "*sulphur*," "*strychnia*." I need not go through the entire list. But I find in the case *all the powerful vegetable alkaloids*, also calomel, antimony, arsenic, etc., distributed carefully among the other medicines, while among the bottles are found most of the saturated tinctures, as veratrum, aconite, opium, etc. No person looking at the contents of this case would suspect for a moment that it contained any other than homœopathic preparations.

Satisfied, as I long have been, that homœopathy and its practice only existed by fraud and deception, I have felt it a duty to treat its practitioners in all cases accordingly. And if this were generally done by the profession (for no one would accuse us of acting unjustly or uncharitably by so doing, for "by their fruits shall ye know them"), I believe the imposture would soon disappear, as it has, generally, in Europe, and in Germany especially. Medicus.

New York, Sept. 9, 1863.

Army Medical Intelligence.

ORDERS, CHANGES, &c.

Acting Surgeon-General Joseph R. Smith, U.S.A., for the last fourteen months chief executive officer in the Surgeon-General's bureau, has been relieved and assigned to duty at St. Louis, Mo.

Medical Inspector-General Joseph K. Barues, U.S.A., has been assigned to duty as Acting Surgeon-General during the absence of Dr. Hammond, in conformity with the Act of Congress, approved July 4, 1836.

Assistant-Surgeons William Watson, Richard D. Lynde, William Grinstead, John H. Currey, and Nathan P. Rice, have been promoted Surgeons of Volunteers, to date September 2, 1863.

Drs. S. A. Holman, of Maine, Charles S. Wood, of New York, Samuel Kneeland, of Massachusetts, William S. Ely, of New York, M. K. Hogan, of the District of Columbia, Enoch Pearce, of Maryland, Henry Clay Roberts, of Pennsylvania, Henry S. W. Burritt, of Connecticut, and Calvin C. Chaffee, of Massachusetts, have been appointed Assistant-Surgeons of Volunteers, to date from September 2, 1863.

Dr. Rudolph Taurzky, of the District of Columbia, Henry W. Willoughby, of New Hampshire, Henry M. Dean, of Connecticut, Alonzo Boothby, of Maine, and Calvin P. Marshall, of Delaware, have been appointed Assistant-Surgeons of U.S. colored troops

Drs. D. D. Hansan and Rudolph Taurzky have declined appointments as Assistant-Surgeons U.S. colored troops.

Surgeon Charles H. Crane, U.S.A., has been assigned to duty in the office of the Surgeon-General.

Medical Inspector John M. Cnyler, U.S.A., has been ordered to assume control of the Medical Inspector-General's Department.

Surgeon Frank Meacham, U.S.V., has been assigned to duty in charge of General Hospital No. 2, Louisville, Ky.

Surgeon A. M. Speer, U.S.V., has been assigned to the charge of General Hospital, Main street, Covington, Ky.

Surgeon B. B. Breed, U.S.V., is on leave of absence at Lynn, Mass.

Leave of absence for thirty days has been granted to Assistant-Surgeon S. G. Wilson, on surgeon's certificate of disability.

Surgeon Thomas H. Bache, U.S.V., has been ordered to the city of Washington, to relieve Surgeon M. Clymer, U.S.V., as Attending Surgeon to sick and wounded volunteer officers, and as President of the Examining Board for Assistant-Surgeons of Volunteers.

Surgeon J. G. Hatchitt, U.S.V., has been assigned to duty as Surgeon-in-Chief, 2d Division, 23d Army Corps.

Surgeon R. L. Stanford, U.S.A., has been relieved from duty in General Hospital No. 12, and assigned to charge of General Hospital No. 7.

Surgeon David J. McKibbin, U.S.V., has been assigned to duty in charge of General Field-Hospital, Stevenson, Ala.

Surgeon Paul B. Goddard, U.S.V., is sick at Philadelphia, Pa.

Assistant-Surgeon G. A. Wheeler, U.S.V., convalescent from typhoid fever, is on thirty days' leave at Topsham, Me.

Surgeon R. H. Gilbert, U.S.V., is on thirty days' sick leave at Elizabeth, N. J.

Leave of absence for twenty days on surgeon's certificate has been granted to Assistant-Surgeon M. L. Rowland, 118th Pennsylvania Vols.

The appointment of William Forbes as Assistant-Surgeon 18th Ohio Vols., has been revoked, there being no evidence of service rendered the Government.

Surgeon S. S. Mulford, U.S.V., has been ordered to proceed without delay to Hilton Head, S. C., and report in person for duty to Surgeon H. R. Wirtz, U.S.A., Medical Director, Department of the South.

Dr. G. Stegman, of Missouri, has been appointed Surgeon of 6th U.S. colored troops. Dr. W. A. McCully, of Ohio, Surgeon 2d U.S. colored troops, and J. R. Weist, of Ohio, Surgeon 1st Regiment U.S. colored troops.

Assistant-Surgeons S. A. Holman, Charles S. Wood, Samuel Kneeland, M. K. Hogan, and Enoch Pearce, have been appointed Surgeons U.S. Volunteers.

Drs. M. H. Salisbury, of Ohio, Jabez Perkins, of Michigan, Gerhard Saal, of Ohio, W. C. Daniels, of Ohio, John C. Norton, of Illinois, and Robert McGowan, of Tennessee, have been appointed Assistant-Surgeons of Volunteers.

The following assignments to duty of Medical Officers, have been made:—

Assistant-Surgeons S. A. Holman and Enoch Pearce, U.S.V., to report to Major-General Meade, commanding Army of the Potomac.

Assistant-Surgeon Charles S. Wood, U.S.V., to report to Major-General Wright, commanding Department of the Pacific.

Assistant-Surgeon Samuel Kneeland, U.S.V., to report to Major-General Banks, commanding Department of the Gulf.

Assistant-Surgeons Wm. S. Ely, H. C. Roberts, and C. C. Chaffee, U.S.V., to report to Major-General Foster, commanding Department of Virginia and North Carolina.

Assistant-Surgeon M. K. Hogan, U.S.V., to report to the Medical Director at Washington, D.C., for duty with Battalion 1st, District of Columbia Vols., commanded by Colonel Baker.

Assistant-Surgeons H. L. W. Burritt, Gerhard Saal, and Robert McGowan, U.S.V., to report to Major-General Burnside, commanding Department of the Ohio, and by letter to Assistant Surgeon-General Wood, at St. Louis, Mo.

Assistant-Surgeons M. H. Salisbury and J. C. Norton, U.S.V., recently appointed to report to Major-General Rosecrans, commanding Department of the Cumberland, and by letter to Assistant Surgeon-General R. C. Wood, at St. Louis, Mo.

Assistant-Surgeon Jabez Perkins and W. C. Daniels, U.S.V., to report in person to Major-General Grant, commanding Department of the Tennessee, and by letter to Assistant Surgeon-General Wood, at St. Louis.

On the expiration of his sick leave, Surgeon Thomas B. Reed, U.S.V., will report for duty to the Medical Director, Department of the Gulf.

Surgeon Pascal A. Quinan, 150th Pennsylvania Vols., is relieved from duty at Camp William, Penn., Chelton Hills, Philadelphia, Penn., and will proceed without delay to join his regiment in the field.

Leave of absence has been granted for thirty days to Acting Assistant-Surgeon A. Van Cleef, U.S.A., provided he furnishes an acceptable substitute.

Leave of absence heretofore granted to Acting Assistant-Surgeon R. E. Price, has been revoked.

Assistant-Surgeon Horace Babcock, 2d Wisconsin Vols., has been discharged the service of the United States, on account of physical disability, and for absence without leave as reported by the rolls of his regiment.

Assistant-Surgeon Gustave Jacobi, 52d New York Vols., has been honorably discharged the service of the United States, on account of physical disability, upon condition that he shall receive no final payments until he has satisfied the Pay Department he is not indebted to the Government.

Leave of absence for fifteen days has been granted to Assistant-Surgeon J. D. Watson, 3d Maine.

Assistant-Surgeon John D. Johnson, U.S.V., has been relieved from duty in the Middle Department, and ordered to report in person to Major-General W. S. Rosecrans, commanding Department of the Cumberland, and by letter to the Assistant Surgeon-General at St. Louis, Mo.

Leave of absence has been granted on surgeon's certificate of disability to Assistant-Surgeon A. D. Andrews, 6th Wisconsin Vols., and Assistant-Surgeon J. H. Hassenpflug, 109th Pennsylvania Vols., for twenty days each, and to Assistant-Surgeon G. L. Porter, U.S.A., for ten days.

Original Lectures.

CYANOSIS.

By J. LEWIS SMITH, M.D,
PHYSICIAN TO THE ORPHAN HOME AND ASYLUM, LECTURER IN THE UNIVERSITY MED. COLLEGE.

[Being a Paper read before the N. Y. Academy of Medicine, February 18 and March 4, 1863.]

PART III.

In fifty-eight cases there was an inter-auricular opening, usually the foramen ovale, sometimes enlarged. This opening was ordinarily larger in those cases in which the septum ventriculorum was complete. In fourteen patients the septum between the auricles was entire, in the remaining twenty-five its condition was not recorded.

The ductus arteriosus was absent in eight cases, actually or virtually closed in twenty, open in twenty-four, and its condition not recorded in the remaining forty-five. In those specimens in which the pulmonary artery was rudimentary, the arterial duct often resembled more a branch of the aorta dividing into two pulmonary branches than it did a connecting vessel. In some patients the ductus arteriosus was found in an unusual situation, and this may occasionally have been true in specimens in which it was believed to be absent. In No. 77 it arose from the left subclavian. In Ramsbotham's case (No. 69) there was no ductus arteriosus, but pulmonary branches were found arising separately from the arch of the aorta. In the other specimens in which no arterial duct was found, nothing is stated in reference to the pulmonary branches.

In all the cases there was a communication between the systemic and pulmonary circulatory systems, either by an opening in the inter-auricular or inter-ventricular septum or by the ductus arteriosus. Frequently, two of these communications, and sometimes all three, were present in the same individual. This fact is interesting, as it has an important bearing on the prevailing theories in explanation of cyanosis.

In this malformation it is evident a larger amount of blood than usual enters the aorta, and this vessel consequently becomes enlarged. In those cases in which the inter-ventricular septum is incomplete, the aortic orifice is usually directly over the aperture, so as to receive blood from both ventricles. Occasionally, it is mainly to the left or even to the right of the septum. The semilunar valves of the aorta are commonly enlarged in proportion to the size of the vessel, but in one specimen there were only two valves (No. 43).

From the increased burden thrown on the right side of the heart, the right auricle and ventricle, obeying the common law of muscular development, become hypertrophied. The walls of the right ventricle become so thick as to resemble the left ventricle, and the latter, not receiving the usual amount of blood from the left auricle, does not attain the size or thickness which it presents in the normal heart. On this account it often seems as if the two sides of the heart were transposed. The right ventricle lies more in front than usual, and it forms the apex of the heart.

We have postponed the consideration of the signs observed during life on examining the chest in each kind of malformation, till the malformation was first described, as they can be then best understood. We have already spoken of the frequency of the pulse and respiration, and occasional intermittence of the former. The signs of an abnormal heart were, in a few instances in the above cases, absent or feebly manifest, if the patient were quiet. No evidence, or but slight evidence, of the malformation existed either on palpation, percussion, or auscultation. Commonly, however, there were well marked signs; usually, the systole of the ventricles was stronger than in the normal heart, and often the hands placed on the præcordial region experienced a thrill or vibratory sensation. In many, probably most patients, a murmur or murmurs accompanied the sounds of the heart, and in order to understand the character of this sign the following descriptions will be quoted:—

Case 11.—"A pretty loud murmur attended the systole of the ventricles, but it was not heard over the aorta or pulmonary artery."

Case 34.—"Contraction of the right ventricle louder than usual, and accompanied by a *bruit de soufflet* action of the left ventricle, much embarrassed, feeble in its contraction, and emitting a peculiar flapping noise." This patient was treated in Guy's Hospital, and was examined by Messrs. Addison and Key, who diagnosticated imperfect septum ventriculorum.

Case 35.—"A strong murmur was noticed between the third and fourth ribs, which seemed to extend upwards, and was accompanied by a tremulous sensation."

Case 39.—"A systolic murmur audible over the surface of the heart generally, with its maximum intensity at the base, and extending in the direction of the left costal cartilages."

Case 42.—"Impulse of the heart felt over a large portion of the front of the chest, and attended by a loud murmur audible over the whole of the dull space; dull space extended from the third rib transversely from the right side of the sternum to beyond the line of the left nipple. Murmur most intense immediately below and within the line of the left nipple, and there the second sound was masked by it; was also heard very loudly between the sternum and nipple, and thence towards the middle of the left clavicle; at the top of the sternum it was less distinct, and of shorter duration, so that it was followed by a clear second sound. To the right of the lower part of the sternum there was heard first an imperfect systolic sound, and this was followed by or lapsed into a short murmur, which again was succeeded by a clear diastolic sound."

Case 44.—"On listening over the third cartilage between the nipple and sternum, a soft blowing murmur was heard very distinctly. It was audible, though less intensely, over the whole præcordia, and in a line towards the middle of the left clavicle. It was also distinctly heard to the right of the upper part of the sternum. * * The heart's sounds were heard in the left dorsal region, but the murmur was not there audible."

Case 54.—"Two bruits were heard in the præcordial region. One of them resembled the fremissement cataire, and was heard during the systole of the heart. The other, which appeared to be produced by the contraction of the auricles of the heart, was so clear and loud as to be heard over the whole entire right side of the chest; on the left side it was scarcely perceptible."

Case 60.—"When quiet, the heart's sounds were distinct and free from murmur, but when disturbed, a loud systolic murmur was heard over the whole anterior part of the chest most intensely at the middle and upper part of the sternum."

Case 61.—"A single murmur was heard with the first sound of the heart, most distinct at the apex, present at the base, most feeble in the left infra-clavicular region, most distinct in the right one; the murmur was heard in both infra-scapular regions, but most distinctly in the left."

Case 66.—"A very loud, whizzing, and prolonged murmur accompanied the systole of the heart, and was of maximum intensity at the inferior border of the third left costal cartilage, close to the sternum. From thence it could be traced up the bone for two inches, when it became inaudible. Over the base of the heart it completely masked the first sound. It could not be detected under the clavicle or in the vessels of the neck."

Case 70.—"A loud bellows sound with the systole of the heart, heard most distinctly on a level with the upper margin of the third rib, was heard louder under the right clavicle and not under the left; another bellows sound at the ensiform cartilage with the first beat; another feebler systolic sound at the apex decreasing higher up the ventricle."

Case 71.—"Had a constant, strong, rasping bruit, accompanying the first sound of the heart, and partially masking it."

Case 87.—"A rough rasping, or sawing murmur, considerably prolonged, accompanied the first sound. This was heard most distinctly on the right side of the sternum, immediately between the third and fourth ribs."

Case 94.—"A very loud, superficial, hissing, bellows murmur was heard in the præcordial region, synchronous with the first sound of the heart. The diastolic sound was healthy or nearly so."

The thrill or vibration which accompanies the action of the heart in these cases, and is communicated to the hand placed over it, is, in the opinion of Dr. Stokes (Diseases of the Heart and Aorta, page 67), produced by the flow of blood through the apertures from the right to the left side of the heart.

It is evident that the same murmur, or rather a murmur produced in the same manner, is described in all these cases, while in some, other murmurs were also present. This murmur is variously described in the records, as hissing, rasping, sawing, flapping, whizzing, and soft blowing. Indeed, the character of the sound appears to have been very different in different patients, but there was usually an agreement in certain particulars. It accompanied the systole of the ventricles, and was commonly most distinct over the base of the heart, but in No. 61, it was loudest at the apex. A writer in the London Medical Times and Gazette, Sept. 10, 1859, referring to what he calls the "basic systolic murmur" in cyanosis, says, "In the great majority of cases it is due, no doubt, to obstruction seated at the pulmonary orifice," and he attempts to show that it is not produced by the flow of blood through the patent foramen ovale. But in No. 11 of the above cases the pulmonary artery was completely closed, so that the murmur could not have been produced in it, and it is therefore probable that it is caused by the flow of blood through the aperture inter-auricular, or inter-ventricular, or both.

The apertures in the inter-auricular and inter-ventricular septa are obviously due to the effect on the circulation, during fœtal life, of the absence or malformation of the pulmonary artery. The blood, being arrested in the right ventricle, escapes at each ventricular systole to the opposite side of the heart, thus preventing the complete formation of the septa.

SECOND MALFORMATION.

Right Auriculo-Ventricular Orifice Impervious or Contracted.

Case 98, M., 21 years.
" 99, 8 mos.
" 100, F., 17 mos.
Case 101, M., 8 years.
" 102, M., 4½ years.

In the first four of these cases the tricuspid orifice was closed; in the remaining case, it was open, but much contracted. In all, the foramen ovale was patulous, and an aperture existed in the inter-ventricular septum. The venous blood, on reaching the heart by the cavæ, mainly flowed into the left auricle, thence into the left ventricle, from which a part passed into the aorta, and the remainder into the right ventricle to the pulmonary artery. In this malformation there is evidently a very thorough admixture of venous and arterial blood. Dr. Peacock also describes the case of a cyanotic child, seven months old, in whom he states this malformation was present; but as the measurements show that the right auriculo-ventricular aperture was larger than that on the left side, and larger than the pulmonary orifice, it seems to me there must have been some other cause of the cyanosis, and this case is therefore placed in the list of uncertain malformations.

The state of the right auricle is mentioned in three of the above cases, in all which its cavity was enlarged; that of the left auricle is mentioned in two cases, in the one enlarged, in the other of natural size; that of the left ventricle is mentioned in three cases, in all hypertrophied; that of the right ventricle is mentioned in all but one, and in these its cavity was very small, nearly obliterated, but its parietes were of considerable thickness; the state of the ductus arteriosus is recorded in one case only, and in this it was closed.

Nothing is said in any of these cases of a thrill or vibration produced by the action of the heart, and in one only is mention made of a murmur; this was loud, and heard below the left nipple. It is interesting to observe how long life may be prolonged with so serious a malformation: one patient lived eight, and another twenty-one years.

THIRD MALFORMATION.

Orifice of the Pulmonary Artery, and the Right Auriculo-Ventricular Aperture Impervious or Contracted.

Case 103, 15 mos.
" 104, 7 wks.
" 105, F., 57 yrs.
Case 106, M., 10 yrs.
" 107, M., 15 yrs.
" 108, F., 25 yrs.

This malformation consists of the first and second combined. The auricles and the left ventricle are well developed, but the cavity of the right ventricle is small, sometimes almost rudimentary, though its walls are thick and firm. In all of the above cases there was an opening in the inter-auricular septum; in one the pulmonary artery was represented by an impervious cord, and in the remaining five the obstruction in this vessel was produced by adhesion of its valves, between which was a small opening. The ductus arteriosus was closed in three cases, open in one, and in two its condition is not recorded. In three cases there was an aperture in the inter-ventricular septum, while in the remaining three, no mention is made of the septum. In all, the tricuspid orifice was pervious but contracted, and in one, the tricuspid valves were united.

In only one case in this malformation is any mention made of a bruit. In No. 106 it is stated that "an intense cardiac bruit was audible between the shoulders." In No. 105 the thrill or vibration was observed, and in No. 107 the sensation communicated to the hand was like that in hydrops pericardii.

FOURTH MALFORMATION.

Right Ventricle Divided into Two Cavities by a Supernumerary Septum.

Case 109, M., 15 yrs.
" 110, F., 38 yrs.
" 111, F., 5 yrs.
" 112, F., 11 yrs.
" 113, F., 9 yrs.
" 114, F., 5 yrs.
Case 115, M., 10 yrs.
" 116, F., 20 yrs.
" 117, M., 19½ yrs.
" 118, F., 20 yrs.
" 119, M., 2 yrs. 5 mos.

The supernumerary septum in this malformation is in the infundibular portion of the ventricle, sometimes not far from the orifice of the pulmonary artery; in other specimens, at the distance of an inch or more. It is muscular, and contains a central aperture. In No. 112 the aperture was only sufficient to admit a probe. In No. 111 the septum had undergone the fibro-cartilaginous degeneration on the auricular side. In No. 110 the septum is stated to have been formed of decussating and hypertrophied fibres, and in one specimen the right ventricle was divided into more than two chambers by enlargement of the tricuspid valves (No. 114).

In six of the eleven cases in this malformation the pulmonary artery was small or contracted at its orifice; in two this vessel was natural; in one its size was greater than that of the aorta, and it was furnished with four valves; in the remaining two cases nothing is said in reference to it, but in one of these last its orifice was probably small, as it was furnished with only two valves. In two of the contracted arteries there were also only two valves, and in one no valves at all.

Dr. E. Lee Jones has been appointed physician for the treatment of officers of the army in New York City, in place of Dr. Hammond, Surgeon U. S. Army, detailed to temporary duty at Charleston.

Original Communications.

BAYONET WOUNDS, WITH CASES.

By JOHN A. LIDELL, Surg. U.S.V.,

IN CHARGE OF STANTON HOSPITAL, WASHINGTON, D.C.

Guthrie says, "a great delusion is cherished in Great Britain on the subject of the bayonet—a sort of monomania very gratifying to the national vanity, but not quite in accordance with matter of fact. Opposing regiments, when formed in line and charging with fixed bayonets, never meet and struggle hand to hand and foot to foot, and this for the very best possible reason, that one side turns round and runs away as soon as the other comes close enough to do mischief." A similar delusion is widely spread in this country. The truth is, that wounds inflicted by the bayonet have been of comparatively rare occurrence in every war that has scourged the earth since the invention of that weapon. And the war in which our Government is now engaged for the preservation of its existence is not an exception to this rule.

In all, *three cases of bayonet wounds* have come under my notice since the war began. One case was that of a soldier belonging to the 106th Regt. Penn. Vols., who was wounded in the upper part of the thigh with a sabre bayonet, during a skirmish of pickets with the enemy, a few days after the battle of Fair Oaks. The femoral artery was divided, and he died of hæmorrhage before assistance could reach him. It is probable, however, that he was wounded accidentally by a comrade and not by the enemy. The other two cases are herewith reported.

I. *Bayonet Wound of Right Thorax.*—Corporal Thomas, Co. "G," 2d U. S. Infantry, aged 40, constitution sound, was stabbed by a bayonet in the hands of a refractory prisoner, Dec. 2d, 1862.

Bayonet entered one-half inch to the right of the median line of the chest, immediately next to the middle of the xiphoid cartilage, penetrating four inches in a direction downwards and outwards, entering the chest over the costal cartilages of the eighth, ninth, and tenth ribs. The surgeon who saw him at that time says that, "on receipt of injury, prostration, vomiting for two days, difficulty of breathing, incapacity of drawing a long breath, total absence of movement of ribs of lower part of the right chest, decubitus on injured side, no spitting of blood, no blood from external wound, no respiration heard on lower part of right chest, puerile respiration above and over the whole of the left chest, mixed however in some parts of the left chest with mucous sounds of bronchitis; gentle stimulants and essence of beef for first day and no drugs; from second to fifth essence of beef only; sixth and seventh day rice, tea-soaked biscuit and essence of beef.

Second physical examination on Dec. 5th: Lower part of left chest dull, beginning to hear sub-mucous rhonchus and small crepitation. Cough less, altogether better, an evacuation without medicine. Vomiting ceased. Dec. 7th: sat near fire twice during the day for half an hour each time. Dec. 8th: third physical examination: lower ribs of right side begin to move in act of breathing, breathes easier, less pain, moist sounds heard over a larger space, do not find small crepitation, no bronchial respiration and voice, upper part of right lung not so labored in respiration; sleeps better; coughs but seldom, no sputa, no fever; sits by the fire for an hour at a time." The foregoing history is copied from the account of his case sent forward with the patient by the surgeon who first treated him.

He was admitted to Stanton Hospital, Dec. 11th, 1862. At that time the wound was closed and the orifice of it covered over by a small dark colored triangular-shaped scab. He complained much of darting pains and stitches in the right side. He exhibited dyspnœa and increased frequency of the respiratory movements, together with "catches" in his breathing. At times the dyspnœa was so great as to compel him to sit up in bed; decubitus on the injured side. The physical exploration showed that there was a moderate amount of effusion in the cavity of the right pleura, with friction sounds ("to and fro" sound) higher up on the same side.

He was directed to keep quiet in bed, to be supported by a nourishing diet, to take fluid extract of cinchona combined with iodide of potassium, and, with a view to still further promote absorption and combat the traumatic pleurisy, to have a succession of blisters applied to his right chest.

About Christmas he had a severe exacerbation of all his symptoms, which was combated by the application of cups, both wet and dry; and again a fresh pleurisy was lighted up in the early part of January, 1853, which was combated in the same way. We now began to suspect that the effusion was purulent (more or less) in character. He did not exhibit hectic fever. Under the tonic and supporting plan of treatment he slowly mended in spite of the relapses, and by the 25th of January he was able to be up most of the time. He was put upon the use of quinine and iron instead of potass. iodid. and cinchona, about this time. He continued to slowly improve, and was discharged from the service on surgeon's certificate of disability, at his own request, February 2d, 1863. He was still very feeble and wan. He still had dyspnœa, and percussion showed that the pleuritic effusion, although diminished in quantity, still remained, but the dyspnœa appeared to be much greater than could be accounted for satisfactorily by the amount of the effusion. We have received no tidings from him since he left the hospital. He will probably succumb sooner or later to the chronic traumatic pleurisy, exhausted after repeated exacerbations of the same.

II. *Bayonet Wound of Left Thigh.*—Sergt. J. T. C., Co. H, 105 Regt. N.Y. Vols., was wounded at the last battle of Bull Run by a bayonet in the hands of an enemy: command was advancing in line of battle in the woods near the railroad, when the enemy charged unexpectedly, and the command was forced to fall back.

The bayonet entered the front of the left thigh in Scarpa's space, about three and a half inches below Poupart's ligament, and passed directly backwards close to the femoral artery: patient thinks the bayonet struck the femur: wound did well and healed without any difficulty in about six weeks, patient remaining with his command all the while.

On examination, January 15th, 1863, I find a small cicatrix, triangular in shape, on the front of the left thigh, about three and a half inches below Poupart's ligament, and lying directly over the femoral artery: and palpation detects considerable consolidation of the parts underneath, such as we would expect to follow the healing process of a bayonet wound extending to a considerable depth into the thigh.

Washington, D.C. Sept. 18th, 1863.

PYÆMIA OR LEUKÆMIA.

By GEO. R. WEEKS, Surg. U.S.V.,

IN CHARGE OF U.S. GENERAL HOSPITAL, MEMPHIS, TENN.

Having recently been much interested in the various pathological conditions resulting in pyæmia, leukæmia, or leucocythemia, and believing that I have observed some facts of interest in this disease, I submit the following observations taken at the bedside, and with a view of establishing the true nature and conditions found in those affected by this particular grade of action. If I can be able to contribute in the least to this end, I shall feel myself amply rewarded. I believe it closely allied to hospital gangrene, and it generally has appeared to be the sequence of this disease.

The ideas that I shall present were taken in the observation and treatment of cases of gangrene, in all 175. 115 of these were observed and reported on at Louisville, Ky., 6 occurred in 17th Army Corps Hospital at Vicksburg, Miss., and 54 at this hospital during the month of August, and with what result will be shown in the following summaries:—

SUMMARY OF CASES TREATED BY BROMINE LOCALLY, AND THEIR RESULT.

No. treated,	146
Recovered,	134
Died,	12
Died of Gangrene,	0
" Pyæmia,	3
" Thrombus and sepsis of the blood,	5
" Mechanical pneumonia,	2
" Cellulitis,	1
" Diarrhœa,	1
Flesh wounds,	104
" bone involved,	42
Average time of arrest,	4·26

SUMMARY OF CASES TREATED WITHOUT BROMINE, AND THEIR RESULT.

No. treated,	29
Recovered,	20
Died,	9
Died of Gangrene,	4
" Pyæmia,	3
" Thrombus and sepsis of the blood,	1
" Mechanical pneumonia,	1
" Cellulitis,	0
" Diarrhœa,	0
Flesh wounds,	24
" bone involved,	5
Average time of arrest,	18·8

Fifty-three of these were treated locally by pure bromine, average time of arrest being 1·92 days, seldom requiring the second application. Ninety-three were treated by comp. sol. of bromine, average time being 8·66 days; and in those treated by the usual methods, the average was 18·8 days. Both had the same constitutional treatment, and were alike situated in other respects.

All the facts noticed during the management of these cases point to the following views in regard to its pathology:—That hospital gangrene is produced by a *specific animal poison*, and that it only enters the system by inoculation upon a traumatic surface. That for a variable time after it is deposited upon or in the sore it is local in character; after which time it enters the blood through the absorbent system, and changes its constituents both vitally and chemically. I have designated this the stage of toxæmia, and this morphologically changes the blood; the result is thrombus, which in my opinion is the plastic portion aggregated and semi-organized, necessarily rendering the remainder aplastic and of little use to the economy in the work of repair. I have many morbid specimens now in my possession that clearly substantiate the truth of these different stages. In illustration of which allow me to cite a few cases.

I.—Adam Brangle, Priv. 1st U.S. Inf., was brought to the 17th A. C. Hosp., of which I had charge, with gangrene of the right arm, which had been amputated previous to his admission some time. Upon auscultation, I diagnosed mechanical pneumonia of the right lung; he complained of pain in the heart and over the lower lobe of the right lung, which gave a flat sound, and with entire loss of vesicular resonance; *no crepitus was heard in the part or above it.* I treated the arm locally with pure bromine, which arrested the gangrene promptly, and the sore continued to granulate till near death, but the pulmonary difficulty continued upwards until the entire right lung was involved, and half of the left, when he died. I examined him carefully, and noted his symptoms three times a day myself as long as he was under my care.

Autopsy, twelve hours after death.—The right lung was very much enlarged and heavy; it readily sank in water; so large that it filled the right side of the thorax entirely; upon section, it presented innumerable dark-colored points of all sizes, which were followed back to where they could be unmistakably seen to be in the pulmonary artery. I hazard little by saying that very nearly all the vessels in the right lung were occluded by thrombi, also a portion of the left, and in none of them were there any signs of a *retrograde movement, or softening.* This was a rapid case, and one that finely illustrates the mode of dying, which was undoubtedly obstruction of a purely *mechanical nature*, so far as the lungs were concerned, producing an excess of carbonic acid in the blood, and deficiency of oxygen from pressure on the vessels and obliteration of air-space. This is the first stage, or one *necessary* link in the pyæmic process.

II.—James A. Beaver, Priv. Co. A, 33d Iowa Inf. Vols., was admitted to this hospital July 30, 1863, with gangrene of the ankle, involving the instep and ankle-joint. I examined him Aug. 8th, and diagnosed thrombus and septic poisoning, and made an unfavorable prognosis. This was the first day after being assigned. Gangrene was existing since July 17th, which was arrested by the use of bromine locally Aug. 12th, but no repair was established. The wound kept clean, and had no fœtor. He died Aug. 18th.

Autopsy ten hours after death.—Lungs filled with a dark-colored semifluid substance in the vessels, and at points portions of unsoftened thrombi yet remained; in some of the larger vessels it was still entire; at some points where the pressure was greatest, softening had commenced in the parenchyma, always most advanced in the part nearest the vessel. I found a large thrombus in the left side of the heart, more than half of it softened, and softening the walls of the heart with which it was in contact, looked of a purple color, had a *gangrenous odor*, and was easily broken down between the thumb and finger, upon moderate pressure. I take it that this case points to the transition state from thrombus to true pyæmia, and marks the process quite clearly. Death perhaps was brought about by Ichoræmia, depraved or perverted nutrition, caused by the septic condition of the blood, whose morbid element was indebted to softened thrombi, and whose product returned to the general circulation, rendering it more poisonous.

3rd. J. S. H. Sutton, Priv. Co. I, 36th Ind. Inft. Vols., passed through both the above mentioned stages, and died from the next, or true pyæmia. Metastatic abscesses were formed in the lower lobe of the right lung of all sizes, from a millet seed to that of a walnut, and also *thrombi, entire, and softening* in the *same* lung, forming new centres for abscesses. This man had been sick a long time, and had gangrene in the popliteal space, which had been arrested previous to death some considerable time, but not in time to prevent ichoræmia. I cite these three cases as marking the stages leading to the state of pyæmia, distinctly and clearly. I have endeavored to present the facts as I observed them in these cases, and let the results follow. Post-mortem appearances are nature's teachings, before whose power our most subtle theories and ingenious hypotheses bow in humble submission.

I have examined all that died, in every one of which I have found *thrombus in the heart and lungs*, in some of the stages before mentioned, until I am inclined to look upon them as a necessary condition, and am fully persuaded that Virchow is right in calling it Leukæmia, as I shall endeavor to prove by and by. These remarks are not only true of gangrene, but are equally so of all that class of diseases arising from blood-poisoning, in which also ichoræmia secondarily plays an important part, and I am not sure but that it will enable us to explain all the phenomena presented. Their accompanying symptoms are very analogous to those arising from the effects of the bite of a venomous serpent, and perhaps what will cure one will arrest the other.

I said in the commencement, that primarily I believed it to be local, and that it passed into the blood by the agency of the absorbents, when toxæmia was produced, but how is this brought about? in what manner are those changes produced? I answer—1st. By contact of the morbid product with the traumatic surface. 2d. Transformation of *cell content*, which I am induced to believe is an impression made by oxydation upon the tissues. 3d. Absorption of the ichorous product, which causes a retrograde movement in the part, and also in the constituents of the blood, which I think is chemico-vital in character, and right here, the corpuscular change is quite apparent by the aid of the microscope. The red corpuscle loses its hæmine, which, becoming granular, is deposited in a circle, and aggregated around the outside of the field. The white corpuscles are very abundant, and occupy the whole surface. Crystals of ammoniacal salts are found in abundance, and an occasional fungus may be seen. Virchow has shown that it is not possible for substances or rather particles of matter to pass through the lymphatic glands, but as in the case of cinnabar, or tattooing, they are arrested, and detained there. I cannot say *how* it is accomplished, but the fact that the morbific agent *does* pass the glands, and as these are the last row of sentinels to contend against, I can see no reason why it should not proceed onward to the blood. I have a case in point. Priv. James Scott, 1st Mo., Co. A, died at this Hospital on Sept. 3d, in whose *thoracic duct* I found a well developed *thrombus*, and sent it to Surg. Brinton, U.S.V., Washington. It was about four inches long, and largest in that portion that occupied the receptaculum chyli. It is the first case that I have ever seen or heard of.

The glands were enlarged, indurated, and of a dark color, as if filled with pigment granules, which I very much suspect they were. The ichor undoubtedly had passed them. If so, the whole process corresponds very nearly to Virchow's idea of their function. This case conclusively proves *three very important facts*, viz. *That the poison, whatever it is, passes through the lymphatic glands; that it is capable of producing thrombus on the other side; and that the morbid element does not reside in the pigment but in its ichor.* I am of the opinion that this settles a vital point in the pathology of Leukæmia.

The death of the part affected by gangrene is a molecular one, and I believe should occupy an intermediate position between ulceration and mortification. It is always accompanied by asthma. Of the cases observed here during the month, the average temperature of the body was 89° Fahrenheit, and the number of pulsations was 101, which significantly points to the manner in which they die, and to the indications for treatment.

In the formation of thrombus, I have invariably found them of the shape of the vessels upon the right side, and globular upon the left, and seldom extending into the vessels. I have one of the left auricle now, weighing 482 grs., and one representing every branch of the pulmonary artery, which had its attachment to the right ventricle.

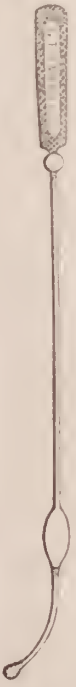
It will be inferred from what I have before stated, that I regard the disease as curable, before its consequences are constitutionally developed. This is exactly what I at present believe. I can see no reasonable prospect of reaching it, and would not know how to make a rational prescription with my present views of its pathology, other than support when it once becomes general. Upon the appearance of thrombus in the heart and lungs, which is easily detected by the physical signs, hope with me ceases; some may recover, but I have not seen them.

The rational remedies indicated, I believe to be oxygen, fluorine, chlorine, bromine, &c. I should expect much from the former, and shall try it as soon as I can. Fluorine is too destructive; chlorine can only be obtained in a fluid state under great pressure, or in the form of mechanical mixture, hence the selection of bromine, which is in the best form, and easiest of application, and over which condition I believe it to have a *specific* influence. I am of the opinion that it will arrest gangrene wherever it can be brought in contact with *all* the pulp, or pultaceous matter; this frequently is very difficult to do, in the burrowing form of the disease, also from the nature of some wounds it is nearly impossible to get at every part.

When the full importance of the *general condition* was observed by me, I resolved to use the protosulphites internally; they did no good; bromine was then tried (3 drops comp. sol. three times a day), but with a like result. I am again putting it to a severe test in all cases under treatment here in the following form: ℞. Bromini comp. sol. ℥ ij., aquæ destillatæ f. ʒ ij., Syr. Simpl. ℥ ij. M. One drachm three times a day. I am favorably impressed with it so far, but cannot speak yet with any certainty.

A NEW UTERINE PORTE CAUSTIQUE.

BY FREDERIC D. LENTE, M.D.



An efficient uterine porte caustique by which the nitrate of silver may be applied thoroughly to the whole extent of a diseased cervix, or to the interior of the body of the uterus, has long been a desideratum. Every physician who has been in the habit of treating diseases of the uterus to any considerable extent, and especially by local medication, must have experienced constant annoyance from the difficulty of making applications with any of the appliances hitherto recommended. It is probably to this cause more than to any other that the intractable nature of chronic inflammation of the cervix (cervical leucorrhœa) is due. I have found the little instrument here represented by far the simplest and most efficient means of applying nitrate of silver to the cervix and body of the uterus, of all the contrivances that I have seen. It has been tried by a large number of physicians in New York, Boston, and other cities, and has given great satisfaction. I have therefore ventured to recommend it publicly to the profession. It is simply a long silver probe attached to a handle, with an olive-shaped enlargement an inch and a half from its extremity; the whole instrument should be just ten inches in length. The enlargement is for the purpose of showing when the extremity has reached the internal os, so as to prevent the caustic from touching the interior of the body of the womb when this is not advisable; if it is to be passed into the body, the enlargement will offer no resistance. It is armed with the nitrate by melting the latter in any convenient vessel; then, after having *cleaned the end thoroughly*, and *heated it moderately* in a *spirit lamp*, by dipping it repeatedly in the liquid caustic, after it has cooled a little, until a sufficient coating is lodged upon it. In applying it expose the os with the bivalve or with Sims's speculum, pass the sound to get the exact curve and direction of the cervical canal; bend the end of the probe to correspond, and then it can be passed directly to the internal os, or to the fundus, without losing any of the caustic in exploring, or unduly irritating the cervix. Just so much of the nitrate may be placed on the probe as may be thought necessary to leave in the uterus; it may be rubbed over the whole diseased surface repeatedly and firmly, and withdrawn, without any danger of detaching it from the probe, if the above directions are observed. The instrument may be had at Tiemann's and at Otto and Reynders's.

Coldspring, September 8, 1863.

Dr. J A. Douglass, Associate Secretary of the Sanitary Commission, has gone to Charleston on the business of the Commission.

Dr. J W. S. Gouley, Assist. Surg. U.S. Army, has been ordered to examine the Enrolling Records in the first ten districts of the State of New York with a view to establish uniformity in the medical examinations.

Reports of Societies.

AN INTERESTING CASE OF BLACK VOMIT,

WITH DISCUSSION AS TO ITS ETIOLOGY.

[Presented to the Kings County Medical Society.]

By J. T. CONKLING, M.D.

(*Concluded from page* 196.)

REMARKS BY DR. D. C. ENOS.

DR. E. said he saw the patient in consultation with Dr. Conkling. He thought the case was an obscure one, presenting some of the phenomena of yellow fever, while many of the symptoms of that disease were altogether absent. The only prominent symptom of yellow fever was the black vomit. Doubtless, as Dr. Bell says, this is the most pathognomonic of all the symptoms of yellow fever; but it would be as erroneous to assert that every case of black vomit is one of yellow fever, as it would be to maintain that yellow fever could not occur without it. When speaking of black vomit, Dr. La Roche says, "considered by itself, without reference to other phenomena by which it is preceded and accompanied, and especially when noticed in a *single* or *a few sporadic instances*, the black vomit is not sufficient to stamp the disease in which it occurs as being the true yellow fever. While, on the other hand, its occurrence in this disease is not sufficiently constant and necessary to justify us in refusing to recognise as such cases which present its other symptoms, merely on the ground that black matter has not been ejected from the stomach." His citations from the best authors to prove both these propositions are ample and conclusive, covering fifteen pages of his great work on yellow fever. Hence, if the case detailed be one of yellow fever, in order to establish it beyond a doubt, the antecedent history, concomitant symptoms, and post-mortem lesions, must give the necessary corroborative evidence. What is their testimony? To determine this question properly, the points of the case which do not assort, as well as those which do, with the known phenomena presented by yellow fever, could be noted.

Some of the facts in this case which do not agree with those *most generally present* in yellow fever, are:—

1st. *The period of incubation was longer.*—The best authorities say the stage of incubation ordinarily varies from a few hours to five or ten days—*occasionally, but very rarely*, to sixteen, twenty, or more days. In this case it was at least nineteen days, and doubtless more, for, as Dr. La Roche says, it is not probable he took the poison the very day he left. His history as given, though not incompatible with yellow fever, still offers no *presumptive evidence* in favor of such a theory, but rather the reverse, since this compatibility itself requires to be established by the most unequivocal evidence that the case was one of yellow fever, its symptoms and its lesions being incapable of any other interpretation. Such a case being made out the mind would be compelled to believe that the man passed in an uninfected ship, this, to say the least, unusually long period of incubation; that he and he alone took the disease at Kingston or Port Cabello, and at a time when it was not prevailing in either place; that in mid-winter he must have taken the malady from its slumbering dregs or from its nascent causes, which it is said "are never effectually banished from tropical seaports."

2d. *It was not ushered in with a chill.*—"There is probably no disease," says Bartlett, "unless it is puerperal peritonitis, the access of which is more *invariably attended* by a chill or rigor than this."

3d. *Pain in the head was absent.*—In yellow fever, according to the same authority, it is almost invariably present—"generally it is acute and violent." Mr. Pym says, "The most characteristic symptom of the disease is the peculiar pain in the forehead and eyeballs, with the drunken appearance of the eye."

4th. *The patient had severe pains in his bowels*, and not in his back, loins, and limbs, which are generally so constant and intense in yellow fever.

5th. *The color of the skin was normal.*—"In fatal cases of yellow fever, yellowness of the surface is almost always present."

6th. *The eyes were not suffused, injected, or yellow*—symptoms, some or all of which usually occur in the course of fatal cases, at least, of the genuine typhus icterodes.

7th. *The patient had excessive thirst*, which Sir Gilbert Blane says is not *usually* the case in yellow fever,—so say Bally, Jackson, Chisholm, Clark, and Dr. Lewis, of Mobile.

We have then the highest authority for believing that all these symptoms are *generally* present in yellow fever. Cases, however, do occur, in which one or more of them are absent, but rarely, if ever, in which all of them are.

These are some of the facts which, during the progress of the case, led Dr. E. to doubt that it was one of genuine yellow fever, notwithstanding the presence of the copious black vomit, which was so acid that it excoriated the fauces, and notwithstanding the constant uneasiness and jactitation of the patient, which are generally so characteristic of the disease. This doubt the post-mortem examination so carefully and so creditably made by Dr. Spier fails to remove.

The livid tinge of the surface which he describes does not equal "the yellow color varying from a pale or light to a dark orange or brown tint," which La Roche says is generally present:—"Sometimes it is greenish, mahogany, leaden, purple, or black." The lungs were engorged with black, as they sometimes are in yellow fever, though Drs. Physick and Cathrall (1793) found the lungs perfectly sound; so as a general thing did Harrison, La Roche, and others. Not unfrequently, however, the lower portions of the lungs are engorged with altered blood. This is frequently so in other diseases characterized by blood dyscrasia. The *dark clot* found in the right cavities of the heart in this case is like that frequently found in yellow fever, though Bally and Pinnell found it of a light amber color. The dark clot is also found in other diseases. The stomach contained the same dark fluid as that vomited, so did the intestines.

Dr. Bell relies mainly on fatty degeneration of the liver as the "pathognomonic lesion" of yellow fever. This is unfortunate for his diagnosis in this case, for the liver was not fatty in the true sense of the term. Dr. E. said he examined the hepatic cells and tissue with Dr. Spier. The cells were unusually normal—less fatty than those of any liver examined at the B. C. Hospital, in the last six months. A few cells contained a little more than the normal quantity of fat, but this can be found in most livers and in various diseases. Hæmatoidin was found abundant in the hepatic tissue, which Dr. Clark says is not found in yellow fever. The liver had not the yellow color so much insisted on by Louis, as the *peculiar* condition in yellow fever, and which is now supposed by some to be owing to acute fatty degeneration. M. Catel says, of 150 cases of yellow fever, all the livers were abnormal in color—discolored, and yellow, fawn, or drab. Dr. Spier says, this liver was very dark, between a purple and a chocolate, with a few patches on the anterior part a little lighter—slightly yellow in tint. The general and microscopic appearance of this liver, then, is unlike that usually seen in yellow fever. The *spleen* was *very soft;* whereas in yellow fever, says Bartlett, it is not the seat of any frequent and important alterations. Louis and Trousseau found it somewhat softened in about half the cases. Dr. Bache, in two out of ten. Dr. La Roche says it is often little, if at all, changed. The kidney was not degenerated, as in Bright's disease. The urine was scanty, though he passed it, he said, the evening before Dr. Conkling saw him. That found in the bladder was albuminous. It is scanty or suppressed in yellow fever; so it is in cholera, or in any disease in which the fluids are passing off rapidly by the skin, or, as in this case, by the gastro-intestinal mucous membrane. The albumen was due to the presence of blood in the urine, as proved by the microscopic examination. The kidneys were congested, but normal in *size* and structure. Dr. Pinnell says, in fatal cases of yellow fever the kidneys are in a condition like that witnessed in Bright's disease. Dr. Blair met with only a few cases of *bloody urine* in yellow fever. He regarded it as a favorable symptom.

The muscular fibres of the heart were perfect. In yellow fever Prof. Riddell found them degenerated, all traces of striation having disappeared.

Dr. Bell said the "liver was just beginning to be discolored," "that fatty degeneration had but just commenced." This may be so, but it hardly answers the purpose of a "pathognomonic" diagnosis. We cannot well say what it was about to do; all we can say, in point of fact, is, the liver was *not* fawn-colored, it was *not* in a state of fatty degeneration. We might as well say the kidneys were in the same morbid condition, because, though otherwise sound and healthy, a few of the tubuli uriniferi were bereft of their epithelium. So far as the heart is concerned, there is no room to predict that any such process was about to take place, for the record is, its "structure was perfect." The molecular disarrangement of the cardiac muscular fibres, which Prof. Riddell found so constant in yellow fever, had *not even commenced.*

Hence, from all these facts, Dr. E. inclined to think the case was not one of *genuine yellow fever.* He expressed this doubt with some hesitation, on account of the positive opinion of Dr. Bell, coincided in, it seems, by the distinguished author of the letter he read. It is proper to remark, however, that Dr. La Roche did not see the patient during life, nor witness the examination of the body after death.

Dr. Bell's explanation of the imperfection of the symptoms and lesions in this case is its "fatal rapidity," which, he says, is usual in climates where yellow fever rarely occurs; "since," he remarks, "the organism is deprived of a gradual adjustment to the influence of the poison, on the same principle as that a vigorous bird speedily perishes in an atmosphere which will sustain one gradually brought under its influence for a much longer time." But surely we must believe that any bird, whether slowly or suddenly brought into a poisonous or foul atmosphere, will live longer or die more gradually when *totally removed* from such atmosphere. Again, supposing this to have been a case of yellow fever, there was ample time for the system to "become adjusted to the influence of the poison." Indeed, this was so ample as of itself to make it rather improbable that the patient had the disease at all.

If not yellow fever, what could this disease have been? It may not be easy to determine this, and assign the proper name. Isolated cases frequently occur which defy nosology. Could it have been the effect of bilious remittent fever? This the patient said he had at Kingston. We shall show that black vomit sometimes occurs in this disease, and that the post-mortem lesions, as a whole, agree better with the pathology of bilious remittent than they do with that of yellow fever. Black vomit occurred in the bilious remittent fever in New York in 1843 in the Hospital, and at Yonkers (*Forrey on Rondout Fever, N. Y. Jour. of Med.*, vol. i. p. 340). Dr. Dickson (authority none will question) in 1825 saw two patients die of bilious remittent fever, on Charleston Neck, who ejected black vomit from the stomach and bowels. He also saw cases in 1827 (*Essays*, i. 355). Dr. Fenner, of New Orleans, saw two cases of it in 1850 (*South. Med. Reports*, ii. 89). Both these authors, let it be remembered, were familiar with yellow fever. Cleghorn saw black vomit in the tertian fever of Minorca, a disease more unlike yellow fever than bilious remittent is. In the Batavian fever, which was a bilious remittent, Dr. J. Johnson said patients sometimes have black vomit, and occasionally after lingering twenty or thirty days. This occurred also, he says, in the Bengal remittent. Trousseau, Lancisi, Garnier, Imray, and others, refer to the occasional occurrence of black vomit in bilious remittent fevers. Dr. La Roche "has seen an interesting case of copious ejection of well marked black vomit occurring in a fatal attack of colic." It will be recollected in this connexion that Dr. C.'s patient *had great pains in his bowels*, and not in his back, loins, and limbs, as in yellow fever cases. Enough has been said to show that black vomit may occur in bilious remittent fever, even a month after the first attack.

Some of the post-mortem appearances in the case under discussion are more consonant with bilious remittent fever than with yellow fever. The spleen was very soft and friable; Dr. Spier says it was "diffluent." Dr. La Roche remarks that, while the spleen is but little if at all changed in yellow fever, in bilious remittent "it is very generally much enlarged and *softened.*" Dr. Spier says the liver was very dark, between a purple and a chocolate color. This description agrees tolerably well with the so called "*bronze liver*" of bilious remittent fever. This color, Dr. Alonzo Clark says, is owing to altered *hæmatine*, which Prof. Virchow named *hæmatoidin.* This coloring matter is not in the cells, but in the hepatic tissues. Dr. Spier's drawing well illustrates this. He found the liver well supplied with hæmatoidin. Profs. Clark, Leidy, and Dr. La Roche say, that, though this modified hæmatin is found in black vomit, it has not been *found in the liver of yellow fever.*

This liver agrees with that of bilious remittent fever in another point. We have already seen that it was but little, if at all, fatty. Prof. Clark, in his letter to Dr. La Roche on the "Bronze Liver," says, a deposit of oil globules in the cells and tissues of the liver is *not so frequently met with, nor is it so abundant in remittent as in yellow fever.* In this letter he also makes an interesting remark on the duration of the coloring matter in the bronze liver. He said, "he had examined the livers of two persons who had had remittent fever a year or more before their fatal sickness. In both the remittent color remained well marked, though less intense than in recent cases. The microscope disclosed the coloring matter unchanged, except, perhaps, in quantity."

Dr. Spier found the hæmatoidin not only abundant in the liver, but also in many other organs and tissues. This shows how profoundly the blood was modified. The minute and thorough examination made by Dr. Spier, without reference to any theory, has done much towards clearing up the difficulties of diagnosis in this interesting case.

From a careful review of all the facts before us, the most plausible theory of the process of the disease appears to be this. That the patient had, as he alleged, at Kingston, bilious remittent fever which confined him to the hospital several weeks—that for two weeks after leaving the hospital he was imperfectly nourished, his diet being *bread and salt fish;* he did not regain his strength. That though he worked his passage to Philadelphia he was all the while very feeble. Arriving here he dined on corned-beef and cabbage; he vomited in the evening. Next day he took salts and cream of tartar, which caused vomiting and purging; in the evening the ejected matters were copious, acid, and dark-colored. This continued at intervals for thirty-eight hours, when he died. It is probable that the *bilious remittent* fever caused the morbid changes in the blood and in the tissues from which Nature was feebly trying to rally—that the last fatal illness was excited in his enfeebled and altered organism by the ingesta which he took, and by the medicine which was given him.

Dr. Bell added, that he thought no one could justly infer from his previous remarks that black vomit necessarily indicated yellow fever, or that it alone was sufficient to stamp a case of disease as such. In addition to what he had said of the symptoms wanting in this case—headache, backache, aching of the extremities, etc.—these, like jaundice, are not unfrequently absent in rapidly fatal cases, in relapse, or in cases enfeebled by other recent disease. There were several such cases among the invalid soldiers under his care last summer. One, in particular, had been sent from the Tortugas on account of dysentery, and at the time he was received into the Floating Hospital his only complaint was an increasing debility. He gradually sank, and died with black vomit in eighteen hours, without other prominent symptoms. There was no question in this case, because the steamer *Delaware*, in which he arrived, was known to be badly infected. Another case also, an invalid from *intermittent fever*, died in twelve hours from the time of attack, with six hours of black vomit. Both of these cases had fatty degeneration of the liver—in one the liver was yellow, in the other it was livid. Besides such cases as these, there is a class of yellow fever patients known as walking cases, which generally die with black vomit within a few hours from the time they come under observation, and are not usually characterized by chill, headache, or other prominent symptom. Yet they are accepted as true cases of yellow fever.

The case under discussion appears to have been rapidly fatal on account of relapse or other previous cause of debility. It may have been bilious remittent fever, though we have no evidence of this, other than that the patient himself stated that he had that disease at the time when, and the place where yellow fever is known to have been prevailing. The period of incubation is no index of the duration of the disease, nor of its severity, while it is nevertheless highly probable that the fatal issue in this case was promoted by the change from the high temperature where it was contracted to the low temperature under which the poison became active.

That a certain period of incubation, chill, pain in head, back, and extremities, jaundice, suffused and injected eyes, and *absence* of thirst—" that *all* of these symptoms are *generally* present in yellow fever"—is contrary to both his observation and his reading; and further, that according to a somewhat extended observation of bilious remittent fever in hot climates, he believes most of these symptoms to be quite as essential to " bilious remittent fever" as to yellow-fever. But of black vomit as a symptom, whether existing almost alone, as in this case, or in connexion with other symptoms, it is certainly much less characteristic of bilious than of yellow fever under any circumstances whatever; and he is therefore wholly unable to see the propriety of taking this symptom to indicate a disease in which it very rarely occurs, rather than one in which it very commonly occurs.

In addition to what has been said of the pathology of the case, it is certainly quite as reasonable to find " a few cells in process of fatty degeneration," and to infer, therefore, that this lesion has but just commenced, as it is not to be satisfied with anything less than the degree of fatty degeneration common to the drunkard's liver in hospital practice.

The presence or absence of hæmatoidin may depend upon the degree of disorganization of the blood corpuscles. This is a recent question in yellow fever, and requires further investigation. The other exceptions of Dr. Enos are abundantly answered by the authority quoted—Dr. La Roche.

Sir Henry Holland, physician to the Queen of England, is on a visit to Washington.

Dr. Henry W. Williams, of Boston, has returned from a European visit. He has communicated his observations on European ophthalmic institutions to the Boston *Medical Journal.*

Dr. J. J. Chisolm, Med. Purveyor of the rebel army at Charleston, publishes the following card:—*Silver Plate Wanted.*—To be converted into caustic for the use of the sick of the army. $8 per ounce will be paid for all prime plate. Old spoons and old plate will answer the purposes of the medical department as well as new. Apply at Medical Purveyor's office, opposite Congaree House.

American Medical Times.

SATURDAY, SEPTEMBER 26, 1863.

REMOVAL OF SLAUGHTER-HOUSES.

New York has at length secured a City Inspector, who, at least, seems to have a regard for its sanitary interests. Whatever may be the motive that inspires his official acts, it is very evident that Mr. Boole is doing more effective work in his department than has been done during the last twelve years. He not only desired to have clean streets, but he set the machinery to work and had them cleaned very thoroughly; and he steadily and perseveringly labors to perfect arrangements whereby they will be kept clean. His last and most important effort has been, to effect the removal of the slaughter-houses beyond the city limits. This is a task which few would have the courage to undertake, both on account of its magnitude, and the vast pecuniary interests concerned.

We may gain some idea of the extent of this nuisance from the following figures. There are at present 223 slaughter-houses located in various parts of the city, of which number 76 are on the west side, and 147 on the east side. They are distributed as follows: In the Ninth Ward there are 26, in the Twentieth Ward 21, and in the Twenty-second Ward 29. On the east side of the city the Seventeenth Ward has 56, the Eighteenth Ward 13, the Nineteenth Ward 18, the Twenty-first Ward 20. In all the other Wards, with the exception of the Eleventh, which has 16, the whole number of slaughter-houses amounts to but 18, which are respectively located in the Twelfth, Thirteenth, Fourteenth, Fifteenth, and Sixteenth Wards. The weekly average of animals slaughtered in New York amounts to about 4,500 head of cattle, and 13,000 sheep, calves, and hogs. These slaughter-house establishments are generally conducted without the slightest regard to the public health, or to the comfort of the neighboring population. The blood and refuse are allowed to drain away in open sewers, or accumulate around the buildings; the animals are confined without food or water for days together, and the air is filled with the disgusting odors which arise from the decaying animal material, or from the works.

The removal of slaughter-houses beyond the city limits is urged, principally, on the ground of their being injurious to the public health. Although there is much evidence in proof of the correctness of this assertion, yet medical opinion is not unanimous upon this point. It is stated that the mortality of the neighborhood of the slaughter-houses of Paris fell 15 to 20 per cent. after their removal. Medical men have frequently testified to the origin and malignancy of fevers, and other zymotic disease, in the vicinity of these buildings. But then we have on record the remarkable report of Duchâtelet, on the establishment at Montfaucon, Paris, at which annually the "greater part of the bodies of 12,000 horses, and from 25,000 to 30,000 small animals are left to rot," the odor of which is sometimes perceptible at a distance of eight miles; and yet the employees are remarkably healthy, and attain to great age.

Whatever importance may be attached to this report, there can be no doubt that a slaughter-house in the midst of a thickly populated part of the town is a great public and private nuisance, and should be abated. City Inspector **Boole** fully comprehends this fact, and proposes the only feasible remedy. He advises the removal of these establishments to the suburbs according to the French system, which is thus described:—

> "There are five *abattoirs* in Paris, three in the northern and two in the southern limits of the city, which were constructed in accordance with a decree of Napoleon the First, in 1809, suppressing all the slaughter-houses then in operation. It is only necessary for our present purpose to give a description of one of these five establishments, and the largest of the five, which is called the *Abattoir de Papincourt.* It consists of twenty-three distinct buildings, on a sloping ground, and within a walled inclosure 645 feet by 570 feet. In front of the abattoir is a small planted promenade. At the entrance are two pavilions, containing the offices of the administrator, and an *octroi*, or receiver's office. To the right and left of the central court, 438 feet by 291 feet, are four slaughter-houses, separated by a road crossing the inclosure. They are each 141 by 96 feet, and include, respectively, a flagged court, on each side of which are eight slaughter-stalls for the use of butchers, sixty in number, by whom the keys are kept. Each one of the slaughter-stalls receives light and ventilation from arcades in the front walls. Above are spacious attics for drying the skins and preparing the tallow. To preserve a cool temperature, a considerable elevation and projection have been given to the roofs. Behind the slaughter-houses are two ranges of sheds, containing sheep-pens, and at the extremities eight stables for about 400 oxen. Each of these buildings contains a loft for forage. At the end there is a watering place, and pens for cattle, besides two detached buildings, each traversed by a broad corridor which communicates with four melting-houses, below which are cellars containing coolers. Beyond these, and parallel with the outer wall, are two buildings, raised on cellars, in which the skins are kept; and near them in front of the entrance is a double reservoir for water 228 feet in length, built of solid masonry, and resting on arches which form stands for carts. There is also a '*triperie*' for washing and boiling tripe and calves' feet. The blood runs into a reservoir prepared for that purpose, and is removed therefrom by pumps, put into casks and sent to the different manufacturers who use it—such as chemists, sugar refiners, etc. The apparatus for slaughtering is uniform, and belongs to the establishment. The blood, offal, and manure are removed daily. Diseased cattle are sent to the pound outside of the city, where after a time they are slaughtered, and the meat used for sundry chemical and other purposes."

The chief opposition anticipated to the practical application of this action is from the butchers. Both in Paris and London they opposed it as an encroachment upon their inherent rights, and the imposition of unnecessary restrictions upon their business. **Mr. Boole** enters into an estimate of the saving in expenses which the French system would bring to the butchers of this city. In the direct outlay of money this would be very considerable, amounting to but about one-third of the present expenses. To this must be added greater facilities in bringing forward animals to the place of slaughter, diminution of hands, increased facilities for marketing by the establishment of up-town markets, &c., &c. The special plan of the City Inspector, in putting his ideas into practical operation, is to erect four abattoirs on the Island, two on the east and two on the west side of the city, above Thirteenth street. The city already owns lots in the proper localities for these establishments.

In the opinion of the City Inspector the time has come when slaughter-houses must cease to exist in the compactly inhabited portion of our city. Laws for their better regulation must yield to their entire abolishment. Whether "there is no season more fitting than the present" to effect this great reform will remain to be seen; but of this there can be no doubt, that every good citizen should heartily endorse the action of **Mr. Boole**, and exert all his influence to accomplish so desirable a change. If once inaugurated it will not only remove these local nuisances, but it will also relieve the streets of the herds of animals driven to market, and of that most disgusting of all street exhibitions, viz. drovers' carts, over-filled with sheep or calves. The opportunity which is now offered for sanitary reform, under the powerful influence of the present **City Inspector**, should not be lost by indifference on the part of the people.

THE WEEK.

There has existed considerable doubt among physicians as to their liability under the Internal Revenue law to a tax on their incomes. The Commissioner has made several decisions. The following extracts embrace the principal points:

> "It is asked whether an assessment for Income Tax is to be made upon collections during the year 1862, for professional services rendered during that year and previous years, and whether an estimate of unrealized, or contingent income due for services rendered in that year, ought to be included? I answer, that the assessment should be made upon all collections during the year 1862, without regard to whether the services were rendered during that or previous years. If any profits made during that year and uncollected, remain uncollected when they might have been readily realized, and with a view merely to avoid the assessment of the tax, they are to be considered as collected, and assessed accordingly; for no evasion of the liability of the tax-payer of his duty under the law, should be allowed to profit him. But merely contingent profits, uncollected, the sum not ascertained, remaining open for adjustment, are not liable to assessment.
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> "2d. As to 'expenses necessarily incurred in carrying on any trade, business, or profession,' physicians cannot be allowed the wear and tear of horses, carriages and harness, any more than they can of their own constitutions, or of their health, necessarily injured in the practice of their vocation; but any incidental expenses, such as the feeding of horses, hire of servants, and such like, are to be deducted from their income.
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> "The amount expended by a physician for the keeping of a horse used exclusively in the business of his profession, is a legitimate deduction from income."

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"**Drunkenness** in England has gradually risen into a most formidable social vice, as appears from the following statement in the *Lancet:*

> By a Parliamentary paper lately issued, it appears that in the year ending Michaelmas, 1861, there were 54,123 persons, male and female, convicted of drunkenness in England and Wales; but in the year ending Michaelmas, 1862, the number convicted reached the high amount of 63,250, whilst not less than 100,000 were proceeded against before justices of the peace for being in a state of inebriety. Thus the disheartening increase of more than 9000 intoxicated persons was proved to have occurred last year! The proportion of drunkards convicted to those taken up did not alter, being in each year about 66 per cent. of those charged with this offence to our national character."

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The English Medical Act which compels every person practising medicine and surgery to be qualified and registered does not, it seems, prevent quacks from this country obtaining a foothold in the profession. Many of these graduates from chartered medical colleges exhibit their diplomas, are registered, and commence practice. The profession of England should understand that our State Legislatures charter colleges of every complexion, and the graduates of these institutions are therefore legally qualified. The title of M.D. in this country has no significance whatever.

Reviews.

A Treatise on Hygiene, with Especial Reference to the Military Service. By William A. Hammond, M.D., Surgeon-General U. S. Army; Fellow of the College of Physicians of Philadelphia; Member of the Philadelphia Pathological Society; of the Academy of Natural Sciences; of the American Philosophical Society; Honorary Corresponding Member of the British Medical Association, etc., etc. Philadelphia: J. B. Lippincott & Co. 1863. 8vo. pp. 604.

When, in 1858, we read in the evidence given by distinguished medical officers before Sir Sidney Herbert's Commission of Inquiry, etc., that a suitable manual upon Military Hygiene did not exist; and that, as was stated by Sir John Hall, Prof. Parker, and the Director-General, Dr. Smith, a well arranged treatise was greatly needed in the Medical Department of the British Army, such confession of the want induced the hope that it would soon be supplied. And to the American soldier and surgeon such a tribute would have been no less welcome than to the British army. But the great war that so suddenly burst upon our unguarded republic called into the military service, as Dr. Hammond remarks in his Preface, "thousands of physicians to take the medical charge of the armies created —many of them well known for their professional eminence, and others, by far the greater number, young and inexperienced, though not lacking the will and ability to do their whole duty when that duty was pointed out to them;" but these physicians found no manual of Military Hygiene among the volumes generously furnished them by the Army Medical Bureau.

Called to the Surgeon-Generalship of the Army in the summer of 1862, in the midst of most exciting campaigns, and with an immense expansion of the service, Dr. Hammond might have repeated the excuse that was offered to the Commission of Inquiry, etc., by the British Director-General, when he stated that he had long had the intention of preparing a manual, but his official duties had not allowed him time for such work. That, under the overwhelming burdens of official duty in charge of the medical service for an army of a million of volunteers, the Surgeon-General should have planned and executed such a work as the treatise now before us, is the best of testimony to the practical estimate he places upon sanitary science and preventive medicine.

A treatise prepared so hastily, and under such pressure of vast official responsibilities, ought not to be—cannot be encyclopædic and complete, or in any sense an exhaustive treatise. It should be eminently practical, and adapted to the wants of the army medical officer. Manifestly this has been the design of the author; and, considered as a philosophical and practical treatise upon the principles and applications of sanitary science in the organization and medical care of armies, he has imparted to its chapters such scope of discussion and such accurate scientific statements as cannot fail to command the attention and awaken the interest, not only of medical officers and the profession generally, but of all educated men in the army.

The subjects discussed in the treatise are presented under three general heads:—

1. *The Examination of Recruits.*
2. *The Agents inherent in the Organism which affect the Hygienic Condition of Man.*
3. *Agents External to the Organism which act upon the Health of Man.*

These subjects are well presented in *twenty-nine* chapters, illustrated with twenty-four woodcuts.

The argument of the author is concisely stated in the Introduction. He says:—"In order that an army may be effective it must be healthy, and in order that it may be healthy the men composing it must be well formed, of good constitution, free from any disease which can impair their efficiency—and kept by physical, mental, and dietetic influences, in such a condition as will, if it do not entirely prevent disease, at least reduce the sickness to the lowest possible minimum. . . .

"To put a soldier into the field costs the government nearly four hundred dollars; should he die, or become permanently disabled in service, a pension is given. Looking at this matter, therefore, merely in a financial point of view, we perceive that it is a subject of serious importance that every means should be taken to preserve the lives and health of those who come forward to fight the battles of their country. . . .

"The greater number of diseases are, as we shall point out more at length hereafter, more or less preventible. When a preventible disease occurs some one is to blame, either the subject of it or those who are charged with the duty of providing for his well being."

This is the doctrine of hygienists, and from the text thus clearly stated by the author the discourse that follows is plain and practical. The first chapters are devoted to the examination of the various questions connected with the subject of qualifications and disqualifications, general and special.

(*To be Continued.*)

The Principles and Practice of Dental Surgery. By Chapin A. Harris, M.D., D.D.S. Eighth Edition: Enlarged and revised, with three hundred and twenty Illustrations. Philadelphia: Lindsay & Blakiston, 1863. Pp. 869.

The present edition of this work has been very greatly improved. The death of its lamented author compelled the publishers to engage the services of eminent dental writers, and several valuable chapters have been added. Prof. Austen has contributed a chapter on Vulcanite; Prof. Johnston, of Baltimore, Dr. Dwinelle of this city, and others, have added to different portions of the work. It may now be considered the most complete work on dental surgery.

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Dr. Cyrus Ramsay, of the New York City Inspector's office, communicates to the *Reporter* the following facts on the comparative frequency of cancer in New York and London:

The annexed table shows the total deaths by this cause in New York, London, and England, in each year from 1851 to 1863:—

YEAR......	1852	1853	1854	1855	1856	1857	1858	1859	1860	1861	1862
New York........	91	77	107	147	154	187	189	198	180	178	169
London	936	1083	1021	1055	1074	1152	1142	1161	1191	1304	1321
England..........	5477	5663	5826	6016	5859	6201	6433	6676	6827	7402	7540

The annual average for ten years, in New York is 150. The annual average for ten years, in London, is 1,112. The proportion is 7½ in London to 1 in New York. When it is remembered that London contains about three times the population of New York, the excess of deaths by this disease in the former is more apparent.

Dr. John A. Lidell, Surgeon U.S.V., has been appointed Professor of Anatomy and Physiology in the National Medical College at Washington.

Prof. F. H. Hamilton has taken up his permanent residence in New York City.

Correspondence.

EXTREME ANÆMIA,

ACCOMPANIED BY A RARE FORM OF DISCOLORATION.

[To the Editor of the American Medical Times.]

Sir:—The patient came twice under my notice during the past summer, and the following is a brief description of her case.

She lives near Schodack on the Hudson river, is a native of this country, about twenty years of age, unmarried, of nervous temperament and delicate constitution. Her eyes are grey, her hair dark brown. Her face, which is one of considerable refinement, is extremely pale, even deathlike, her hands very thin and white, and her tongue and gums much lighter than the natural hue. Her whole appearance is that of a person who has sustained severe losses of blood, and this effect is heightened by contrast with two circles, which vary in color from jet black to a deep bluish black, and which surround the eyes and are parted by the bridge of the nose. They are about three-quarters of an inch in width, quite symmetrical in shape, and are constantly present, although varying at times to a trifling extent in depth of color. Unlike Stearrhœa they are not greasy or the result of an apparent exudation, but as a general rule are dry, and resemble stains upon or beneath normal integument. When rubbed the pigment can be partially removed, but the friction leaves the skin quite tender and the discoloration soon returns. A watery discharge sometimes takes place from the rings, and will blacken those portions of the integument upon which it runs.

The eyes suggest those of a ringdove, the rings being black, or the effect which is produced by the black leather spectacles which are occasionally worn by boys.

This discoloration was first noticed about two years since on the return of the girl's mother, after a few hours' absence. It was then of a greenish hue, but has gradually become darker. There is great hyperæsthesia of the surface, and the patient is very sensitive to cold. The pulse is very difficult to detect, being exceedingly small and frequent, and easily confounded with the twitchings of the flexor tendons at the wrist, which are in constant action. She has very little appetite, but likes clams in any form, and as a general rule, salt food in preference to fresh. Suffers considerably in consequence of a pain, perhaps connected with the ovaries, which extends from just above the lower ribs to the groin, and usually occupies the left side, although often felt upon the right. She does not complain of any pain in passing water.

Menstruation first occurred at eleven years of age, and the discharge continued to appear quite regularly, although somewhat scantily, until after a very severe attack of scarlet fever at the age of fourteen, which left her very much reduced. This was followed by menorrhagia until two years since, when the menses disappeared. For a year she has been subject to discharges of blood *per anum*, passing a large quantity almost daily, accompanied with spasms and violent pain. She has also suffered much from severe spasmodic paroxysms and from all the train of nervous symptoms to which anæmic and hysterical females are liable, but still maintains a good degree of resolution.

The remainder of the body is free from discolorations. Various methods of treatment have been resorted to at different times, but the patient still remains a constant sufferer.

I have not been able to find a similar case described in several books to which I have referred, and think it will interest the members of the profession.

Yours, etc.,
F. A. Burrall, M.D.
Physician to the Northern Dispensary.

Army Medical Intelligence.

GENERAL ORDERS, No. 308.

War Department,
Adjutant-General's Office,
Washington, September 12, 1863.

The Medical Inspector-General has, under direction of the Surgeon-General, the supervision of all that relates to the sanitary condition of the Army, whether in transports, quarters, or camps; the hygiene, police, discipline, and efficiency of field and general hospitals; and the assignment of duties to Medical Inspectors.

Medical Inspectors are charged with the duty of inspecting the sanitary condition of transports, quarters, and camps of field and general hospitals, and will report to the Medical Inspector-General all circumstances relating to the sanitary condition and wants of troops and of hospitals, and to the skill, efficiency, and conduct of the officers and attendants connected with the Medical Department. They are required to see that all regulations for protecting the health of troops, and for the careful treatment of and attendance upon the sick and wounded, are duly observed.

They will carefully examine into the quantity, quality, and condition of medical and hospital supplies, the correctness of all medical, sanitary, statistical, military, and property records and accounts pertaining to the Medical Department, and the punctuality with which reports and returns, required by Regulations, have been forwarded to the Surgeon-General.

They will ascertain the amount of disease and mortality among the troops, inquire into the causes, and the steps that may have been taken for its prevention or mitigation, indicating, verbally or in writing, to the medical officers such additional measures or precautions as may be requisite. When sanitary reforms, requiring the sanction and co-operation of military authority, are urgently demanded, they will report at once, in writing, to the officer commanding Corps, Department, or Division, the circumstances and necessities of the case, and the measures considered advisable for their relief, forwarding a duplicate of such reports to the Medical Inspector-General.

They will instruct and direct the medical officers in charge as to the proper measures to be adopted for the correction of errors and abuses, and, in all cases of conflict of views, authority, or instructions, with those of Medical Directors, will report the circumstances fully and promptly to the Medical Inspector-General for the Surgeon-General's orders.

Upon or near the beginning of each month, Medical Inspectors will make minute and thorough inspections of hospitals, barracks, camps, transports, &c., &c., within the districts to which they are assigned, in conformity with these instructions, and the forms for inspection reports furnished them.

Monthly inspection reports, in addition to remarks under the several heads, will also convey the fullest information in regard to the medical and surgical treatment adopted; the advantages or disadvantages of location, construction, general arrangement and administration of hospitals, camps, barracks; the necessity for improvement, alteration, or repair, with such recommendations as will most certainly conduce to the health and comfort of the troops, and the proper care and treatment of the sick and wounded. When alterations, improvements, or repairs, requiring the action of Heads of Bureaux, are considered essential, special reports, accompanied by plans and approximate estimates of quantities or cost, will be made.

Medical Inspectors will make themselves fully conversant with the regulations of the Subsistence Department in all that relates to issues to hospitals, whether general, field, division, or regimental, and will satisfy themselves, by rigid examination of accounts and expenditures, that the fund accruing from retained rations is judiciously applied, and not diverted from its proper purposes through the ignorance or inattention of medical officers, giving such information and instruction on this subject as may be required. They will also give close attention to the supervision of cooking by the medical officer, whose duty it is, under the act of Congress of March 3, 1863, and General Orders, No. 547, of 1863, to "submit his suggestions for improving the cooking, in writing, to the commanding officer," and to accompany him in frequent inspections of the kitchens and messes.

They will exercise sound discrimination in reporting "an officer of the Medical Corps as disqualified, by age or otherwise, for promotion to a higher grade, or unfitted for the performance of his professional duties," and be prepared to submit evidence of its correctness to the Medical Board, by whom the charge will be investigated.

Medical Inspectors are also charged with the duty of designating, to the surgeon in charge of general hospitals and convalescent camps, all soldiers who are in their opinion fit subjects for discharge on surgeon's certificate of disability, or sufficiently recovered to be able for duty. In all such cases they will direct the surgeon to discharge from service, in accordance with existing orders and regulations, or return to duty those so designated.

Official communications to the Medical Inspector General will be directed to the Surgeon General, U.S.A., and plainly addressed on the left-hand lower corner of envelope. "For the Medical Inspector General," the name and title of the writer being *written* under the words "Official Business."

It is expected that all commanding officers will afford every facility to Medical Inspectors in the execution of their important duties, giving such orders as may be necessary to carry into effect their suggestions and recommendations; and it is enjoined upon all medical officers, and others connected with the Medical Department of the United States Army, to yield prompt compliance with the instructions they may receive from Medical Inspectors on duty in the Army, Department, or District in which they are serving, on all matters relating to the sanitary condition of the troops, and of the hygiene, police, discipline, and efficiency of hospitals.

By Order of the Secretary of War:

E. D. TOWNSEND,
Assistant Adjutant General.

ORDERS, CHANGES, &c.

Leave of absence for twenty days has been granted to Assistant-Surgeon L. Jewett, 14th Connecticut Vols.

Assistant-Surgeon James H. Hill, 30th Missouri Vols., having tendered his resignation, has been honorably discharged the service of the United States on account of physical disability, he having been absent sick since February 11, 1863, as reported by the rolls of his regiment.

Leave of absence has been granted to Acting Assistant-Surgeon W. J. C. Duhamel, U.S.A., for ten days.

The resignation of Surgeon Charles Mayo, U.S.V., has been accepted by the President, to take effect September 8, 1863.

Surgeon L. C. Rice, U.S.V., has relieved Assistant-Surgeon H. R. Tilton, U.S.A., in charge of Floating Hospital "Nashville," Vicksburg, Miss.

Surgeon G. Grant, U.S.V., has been relieved from duty at Evansville, Ind., and assigned to duty as Superintendent of Hospitals, at Madison, Ind.

Surgeons G. Taylor, U.S.A., and Alexander B. Mott, U.S.V., have been assigned to duty as members of the Board in session at New York, for the examination of Surgeons and Assistant-Surgeons of colored troops.

Surgeon J. J. Craven, U.S.V., is on duty at Morris Island, S. C., as Chief Medical Officer of troops under command of General T. Seymour.

Surgeon M. Clymer, U.S.V., has been assigned to duty as Chief Medical Officer, at Beaufort, S. C.

Surgeon R. B. Bontecou, U.S.V., is sick in quarters at Hilton Head, S. C.

Surgeon J. E. McDonald is temporarily on duty as Medical Director, 9th Army Corps, during the absence of Surgeon W. C. Otterson, U.S.V., who is on leave at his home for the benefit of his health.

Surgeons J. L. Teed, Francis Salter, G. W. Hogeboom, and W. Threlkeld, U.S.V., and Assistant-Surgeons C. S. Frink and William Carroll, U.S.V., have been appointed to the Cumberland Hospital, Nashville, Tenn.

Surgeon James T. Ghiselin, U.S.A., has been ordered to report for duty to Major-General Meade, commanding Army of the Potomac.

Surgeon E. Shippen, U.S.V., has been ordered to report to Surgeon W. S. King, U.S.A., Medical Director at Philadelphia, Penn., to relieve Surgeon P. B. Goddard, U.S.V., in charge of the South street General Hospital in that city.

Surgeon A. M. Clark, U.S.V., is under medical treatment at Washington, D. C. Dr. C. is suffering from the effects of sunstroke, received some time ago.

The Mansfield General Hospital at Morehead city, N. C., is completed and is receiving patients. Surgeon J. B Bellangce, U.S.V., is in charge.

The General Hospital in the Central Park, New York, will not be discontinued.

The Board of Officers convened by Special Orders 356 of August 11, 1863, from the Adjutant-General's Office, "to examine all convalescents for admission to the Invalid Corps, that may be found at the various hospitals in and around Philadelphia," has been dissolved.

The Medical Department has received intelligence of the death of Surgeon B. Darrach, U.S.V., at Vicksburg, Miss., in July last.

Leave of absence for fifteen days has been granted Act. Assistant-Surgeon F. G. H. Bradford, U.S.A., with permission to visit Hilton Head, S.C.

Assistant-Surgeon Abel C. Benedict, U.S.V., has been promoted Surgeon to date September 16, 1863.

Sherman Morse, late Assistant-Surgeon, 2d New York Cavalry, whose appointment was revoked by Special Orders, No. 275, Adjutant-General's Office, has been restored to his regiment, with pay from date of rejoining it, provided the vacancy has not been filled, and that the regiment is not deprived of one Assistant-Surgeon under the requirements of General Orders No. 182. Evidence of the vacancy to be obtained from the Governor.

Leave of absence for five days has been granted to Assistant-Surgeon S. B. Ward, U.S.A.

Surgeon A. M. Clark, U.S.V., has been relieved from duty with the Army of the Potomac, and ordered to repair to Washington, and report for duty to Colonel Hoffman, Commissary General of Prisoners.

So much of Special Orders No. 404, September 9, 1863, as discharged Assistant-Surgeon James H. Hill, 30th Missouri Volunteers, is hereby revoked, he having been previously discharged by Special Orders 396, September 3, 1863, from the Adjutant-General's Office.

Surgeon William Moss, U.S.V., has tendered his resignation.

The resignation of Hospital Chaplain Charles Seymour has been accepted by the President.

So much of Special Orders No. 408, September 11, 1863, as directed Assistant-Surgeon William S. Ely, U.S.V., to report to Major-General Foster, Commanding Department of Virginia and North Carolina, has been revoked, and he will report for duty to the Surgeon in charge Division No. 1, Annapolis General Hospital.

Surgeon William H. Church, U.S.V., Medical Director of the Dept. of the Ohio, has been granted thirty days' leave, with permission to tender his resignation at the expiration of his leave.

Surgeon Thomas F. Perley, U.S.V., has been assigned to duty at Portland, Maine, and will render medical services to all officers and soldiers of Volunteers who may be in that city.

Assistant-Surgeon Alexander Collar, 24th Michigan Volunteers, has been honorably discharged on account of physical disability and for absence without leave as reported on the rolls of his regiment.

Medical News.

Cholera at Bombay.—A sharp visitation of cholera in Bombay has carried off several Europeans, but the scourge has now disappeared.—*Lancet.*

Obscene Circulars.—Rascality seems to have manifested curious ingenuity in furtherance of the schemes of a so-termed American medical practitioner, who, calling himself a doctor, lives where those whom he addresses most do congregate. A yellow bill, setting forth in most unmistakable terms that which he proposes to treat, has attached to it a small slip of adhesive paper, which enables it to be fastened to the backs of private carriages standing in the streets. This bill, printed in true sensation style, is headed "No cure, no pay," and appropriately, on the part of the alleged American physician, announces his overtures to the public.—*Lancet.*

The Ventilation of Ships.—A plan of ventilation, invented and patented by Dr. Edmonds, Staff-Surgeon of the *Victory*, is to be tested in the turret-ship *Royal Sovereign*, at present in course of construction at Portsmouth. Dr. Edmonds's proposed system is self-acting, and it professes—

Not only to furnish an ample supply of pure fresh air to the crew, but also to effect the very important object of preserving the ship's timbers from decay or dry rot, by creating a constant circulation of air throughout the framework of the ship. This is effected by converting the timber spaces from the keel upward, between the "ribs," so to speak, of the ship, into draught channels leading into a tunnel shaft fore and aft on each side of the ship's berthing deck, which communicates by cross shaftings with the funnel, the draught of the funnel furnishing the motive power for the suction of a continuous current of air upwards through the ship's timbers, and carrying off the foul air and gases from the ship's hold and bilges without tainting the air the crew breathe on the berth deck.—*Med. Times and Gaz.*

Original Lectures.

CYANOSIS.

By J. LEWIS SMITH, M.D,

PHYSICIAN TO THE ORPHAN HOME AND ASYLUM, LECTURER IN THE UNIVERSITY MED. COLLEGE.

Being a Paper read before the N. Y. Academy of Medicine, February 18 and March 4, 1863.]

PART IV.

The inter-ventricular septum was incomplete in eight cases, complete in one (No. 111), and in two its condition was not recorded. The inter-auricular septum was incomplete, usually in the fœtal state, in six cases, closed in four, and its condition not recorded in one (No. 110). The ductus arteriosus was absent in two cases, closed in six, and its condition not mentioned in three. It is an important fact, that in one specimen (No. 111) there was no communication between the two sides of the heart, and the arterial duct was closed. In all the other cases of cyanosis, so far as is certainly known, there was communication between the two circulatory systems at the centre of circulation. But it is probable that the septa were also perfect, and the arterial duct closed in No. 110, the records of which case are not complete.

The right auriculo-ventricular aperture and the walls of the right ventricle do not appear to be much affected in this malformation. The right auricle was sometimes dilated, in other cases natural.

There are records of auscultation in five cases as follows:—

Case 109.—"A loud murmur was heard accompanying the impulse of the heart. It was of a soft or blowing character, and was most intense at the cartilage of the third left rib, near the sternum, and the second sound was there inaudible. From this point it continued to be heard very distinctly, though decreasing in intensity, along the upper part of the sternum, in the subclavian and carotid arteries, and on the left of the spine, in the interscapular and dorsal regions. It was also heard, less distinctly, in a line from between the nipple and the sternum towards the middle of the left clavicle. Below the level of the nipple the murmur became shorter and more feeble, and, at the point of pulsation of the apex, towards the epigastrium, and on the right side of the lower half of the sternum, it was followed by a very clear second sound.

Case 110.—"Impulse of the heart rather weak; the first sound shorter and more flapping; the second sound less distinct than natural."

Case 111.—"* * over a large portion of the front of the chest a loud systolic murmur was audible. This murmur was thought to be most intense midway between the left nipple and the sternum, but it was also very distinct from this point towards the middle of the left clavicle, across the sternum to the right side, and along the whole of the middle and lower part of the sternum. In these situations the diastolic murmur was indistinct, but at the upper part of the sternum, and at the point of pulsation of the apex of the heart, the murmur was less intense and prolonged, and the diastolic sound clear. A feeble murmur was audible to the left of the spine in the interscapular space."

Case 116.—"The two sounds are perceived opposite the apex of the heart; the first a loud, prolonged bellows murmur with a very sensible purring tremor opposite the arterial orifices of the organ, and the second very short and loud. The bellows murmur was very distinct to the top of the sternum, along the course of the pulmonary artery, and limited superiorly by the clavicle, and on the sides by the right edge of the sternum."

Case 117.—"A loud bruit was heard below the left nipple, and upwards from that spot, and to the right, reaching over the sternum. This bruit accompanied the systole of the heart, and was of a swishing character." Another examination: "A loud bruit heard, more especially over the aortic valves; the sound does not extend beyond the arch in the direction of the aorta. A systolic bruit was also heard over the apex."

The four malformations now considered have a similar effect on the circulation; in all there is obstruction to the current in the right side of the heart. The malformations which we are next to consider have a different effect on the circulation, although the effect as regards the character of the blood is the same.

FIFTH MALFORMATION.

One Auricle and One Ventricle.

Case 120,		10 days.	Case 126,	10½ months.
" 121,	M.	24 hrs.	" 127,	5 days.
" 122,		3 days.	" 128,	7 days.
" 123,		6 days.	" 129,	6 days.
" 124,		8 days.	" 130,	2 days.
" 125,	F.	4 hrs.	" 131,	4 months.

In these cases of single heart, or of heart with one auricle and one ventricle, there was frequently the rudiment of another auricle or ventricle, or of both. In No. 120 there was a cul-de-sac in front of the aortic orifice, being, in the opinion of Dr. Peacock, the analogue of the right ventricle. In No. 124 the main auricle was the right dilated, and the left was rudimentary. In No. 125 the right auricle was represented by a sinus, and the right ventricle by a cylindrical sac, the left auricle and ventricle with these exceptions forming the entire heart. In No. 121 the heart is said to have consisted entirely of the right auricle and ventricle, the left side being absent. In No. 127 there was a rudimentary auricle not larger than a horse-bean, and into it the cavæ entered. This small auricle communicated with a cavity not larger than a swan-shot, evidently the representative of the right ventricle. In Case No. 130 there were really two distinct auricles, but practically only one, for there was no communication between the left auricle and the common ventricle, except through the right auricle. In No. 131 the two auricles entered about equally into the formation of the common auricle, but the ventricular portion of the heart consisted of the left ventricle with but a rudiment of the right. In Nos. 122, 126, and 129, no rudimentary cavities were found, and there seemed to be an equal development of the two sides of the heart.

In all the cases in this malformation there was a single auriculo-ventricular orifice, usually guarded by a tricuspid valve, but in No. 125 the valve was mitral; in No. 120 the record states that the orifice was guarded by tendinous valves, and in No. 123 by a valve which was neither tricuspid nor mitral, but resembling the former more than the latter.

The size of the heart in these cases did not differ materially from that of the organ in its normal state, though its shape in some specimens was somewhat changed. The cavæ and pulmonary veins, in entering the auricle, usually preserved their normal relation, but in No. 120 the latter vessels formed a common trunk. In all the cases, one artery only arose from the ventricle, which gave off the pulmonary branches and continued aorta.

The table shows that individuals with this malformation are usually short-lived. All but three died within the first month. The history of a case of this malformation, in which death occurred in twelve hours, was related by Dr. Leigh before the Boston Society for Medical Improvement in April, 1854, but it is not stated whether there was cyanosis. This early death is probably attributable more to the fact that there was only one auriculo-ventricular aperture and one large arterial trunk than to the fact that the auricle and ventricle were single, for, as we shall see hereafter, the patient may live for years, without even cyanosis, with large apertures in the inter-auricular and inter-ventricular septa, provided the orifices and vessels of the heart be of their natural size, and in their natural relation.

No record was made of the character of the heart's sounds, except in two cases. In No. 125 "a marked bellows sound replaced the normal sound of the heart during the diastole." In No. 127 it is stated that the succession of cardiac sounds was regular. The bellows sound observed in the former of these cases differed from that occurring in the *First Malformation* in that one accompanied the diastole, the other the systole.

SIXTH MALFORMATION

Two Auricles and one Ventricle.

Case 132, M., 22 years.
" 133, M., 22 years.
" 134, M., 16 years.
Case 135, 10 weeks.
" 136, M., 11 years.
" 137, M. 9 mos.

Although in this malformation there were two distinct auricles, they were in all the cases connected by an open foramen ovale, unless in No. 136, the complete records of which I have not had access to. There was an auriculo-ventricular aperture for each auricle, usually guarded by the proper valve. The ventricle gave origin to the aorta, of large size and with perfect valves, and to the pulmonary artery. The latter vessel in No. 133 was much contracted; in No. 132 its valves were imperfect; in No. 134 its valves were adherent, forming a ring; in No. 135 this artery was impervious, ending in a cul-de-sac. There was, generally, a pretty uniform development of the ventricular walls. In Case 137, which occurred in the practice of the late Dr. Hoffman of this city, there were two ventricles, but the left was rudimentary; the auricles communicated by separate orifices with the left ventricle, and from this ventricle both the pulmonary artery and aorta arose, the former vessel scarcely one-fourth the size of the latter. This malformation differs from the preceding, not only in the fact that there are two auricles, but that each has an independent connexion with the ventricle, and usually the ventricle gives origin to a pulmonary artery as well as aorta, and therefore there is much less intermingling of blood. There are several recorded cases of this malformation in which there was no cyanosis, and in some of these there was only one arterial trunk connected with the common ventricle. There is no record of the sounds of the heart in the cyanotic cases of this malformation, but in one in which there was no cyanosis, narrated to the London Path. Soc. by Dr. Hale, in 1853, the following record was made: "a superficial bellows and whizzing sound at the sternum, near the third costal cartilage. Over the apex of the heart loud bruits were heard of a rapid and indistinct character."

SEVENTH MALFORMATION.

A Single Auriculo-Ventricular Opening: Inter-Auricular and Inter-Ventricular Septa Incomplete.

Case 138, F. 6 years.

This malformation, of which there is one recorded case, is closely allied to the two preceding. The single auriculo-ventricular orifice in this specimen was placed centrally, and was furnished with a perfect tricuspid valve. The foramen ovale was largely open, and the septum above, as well as that below the tricuspid valve, was considerably deficient. Nothing unusual was observed in the pulmonary artery and aorta and their valves, except that the former vessel was relatively small. There is no record of the sounds of the heart in this case.

EIGHTH MALFORMATION.

Mitral Orifice Closed or Contracted.

Case 139, M., 4 years.
" 140, M., 57 years.
Case 141, F., 22 months.

In Nos. 139 and 141 the mitral orifice was entirely closed, and in No. 140 it was contracted, but pervious. In all these cases there was an opening in the septum auricularum, so that the current of arterial blood obstructed at the mitral orifice escaped into the opposite auricle and mingled with the venous blood. The current, then, with the exception of the little which in one case passed through the mitral orifice, entered the right ventricle, and as in all the cases the aorta arose in part from this ventricle, it then divided, some entering the aorta, the rest the pulmonary artery. The circulation in this malformation is very similar to that in the heart containing two or three cavities. The state of the heart in No. 141 is worthy of especial notice. There was complete transposition of the two sides with their vessels. The cavæ, tricuspid orifice and valves, and the pulmonary artery, were on the left side; the pulmonary veins and aorta on the right side. From the transposition being complete, it is probable there would have been no harm to the patient had there been a perfect mitral orifice. There is no record of auscultation in any of these cases.

NINTH MALFORMATION.

Aorta Absent, Rudimentary, Impervious, or Partially Obstructed.

Case 142, M., 21 years.
" 143, 4 days.
Case 144, M., 6 months.

Although the aortic orifice is so frequently the seat of disease in the adult, it is rarely the seat of malformation. In the above three cases, however, the cyanosis was attributed to congenital obstruction at this point. In No. 142 the aorta was contracted to one-third its normal size, and its semilunar valves were insufficient. In No. 143 there was no aortic orifice; in No. 144 the aortic orifice was not only contracted, but the valves were thickened, and two in number. In all these cases there were communications between the two sides of the heart. In No. 142 the septum of the auricles was absent; that of the ventricles imperfect; in No. 143, the ductus arteriosus and foramen ovale were open, and the former was also pervious in No. 144. The right side of the heart and the pulmonary artery were either in their natural state or enlarged. A record of auscultation was made in one case, No. 142; "* * * a *bruit de soufflet*, beginning with the first sound of the heart, was heard, and prolonged so as to obscure the second sound; heard with greatest intensity under the middle bone of the sternum."

TENTH MALFORMATION.

Aortic and the Left Auriculo-Ventricular Orifices Impervious or Contracted.

Case 145, 21 hours.

This malformation corresponds with the third on the opposite side of the heart. In the one specimen in which it was present the mitral and aortic orifices were much contracted, the latter to the diameter of two lines; the left ventricle was nearly obliterated; the ductus arteriosus was pervious and of large size.

ELEVENTH MALFORMATION.

Aorta and Pulmonary Artery Transposed.

Case 146, M., 10 months.
" 147, F., 7 months.
" 148, 18 days.
" 149, F., 2 or 3 days.
" 150, F., 2 days.
" 151, 2 months.
" 152, M., 10 weeks.
Case 153, M., 5 months.
" 154, M., 2 months.
" 155, 3 years.
" 156, 2 yrs., 9 mos.
" 157, F., 15 weeks.
" 158, F., 10 hours.
" 159, 2½ years.

These were not, properly speaking, cases of malformation, but of malposition of the two great arterial trunks. With the exception of this transposition, and the apertures in the inter-auricular and inter-ventricular septa, the heart and its vessels were in their normal states in all the cases but one. In No. 146 the mitral and tricuspid valves were also transposed.

In this curious malformation, the blood returning to the heart by the cavæ enters the aorta without being arterialized, and is again distributed to the system. On the left side of the heart, the blood returning from the lungs is sent back to the lungs through the pulmonary artery. It is evident that in such a malformation, the two circulating currents must be almost as distinct as in two individuals, and life could not be prolonged for an hour were it not for the resources of nature in compensating for vices of organization. In all the cases there was communication between the two circulatory systems, either by openings in the septa, or by the ductus arteriosus, or by both.

The ductus arteriosus was open in nine cases, closed in three, not found in one, and its condition not noted in one. In thirteen cases the foramen ovale was open, and in the remaining case its condition was not mentioned. The interventricular septum was complete in five cases, deficient in three, and no mention made of it in six. In one case, that narrated by Prof. Walshe, there is a record of auscultation as follows: "No abnormal murmur in the cardiac region or in the course of the great vessels; heart's action tumultuous, impulse strong and widely diffused."

TWELFTH MALFORMATION.

The Cava Entering the Left Auricle.

Case 160, F., 1 year.

The heart in this case was thick at the apex, so as to present rather a cuboidal shape. The septum auricularum was absent, the septum ventriculorum imperfect at the base; there were two descending cavæ, one of which entered the right, the other the left auricle; the ascending cava entered the left auricle; the aorta arose from both ventricles; the pulmonary veins and artery were in the usual situation, the latter of small size. The circulation in this malformation is evidently very similar to that in cases of a single auricle and single ventricle. The character of the sounds of the heart is not mentioned.

THIRTEENTH MALFORMATION.

Pulmonary Veins Opening into the Right Auricle or into the Cava or Azygos Veins.

Case 161, F., 45 years. | Case 162, 2 yrs., 2 mos.

In the first of these cases the four pulmonary veins entered the right auricle. In the second case they were not observed, but did not open into either auricle, so that they must have entered the superior cava or the azygos veins. In both cases the right side of the heart and the pulmonary artery were largely developed, the left side of the heart and the aorta comparatively small. In both the septum of the auricles was imperfect, so that a part of the mixed current passed successively into the left auricle, left ventricle, and the aorta, but the larger portion entered the pulmonary artery. In one case the ductus arteriosus was impervious, in the other its condition is not stated. In neither is mention made of the inter-ventricular septum, or of the sounds of the heart.

FOURTEENTH MALFORMATION.

Aorta Impervious or Contracted near its point of union with the Ductus Arteriosus; Pulmonary Artery wholly or in part Supplying Blood to the Descending Aorta through the Ductus Arteriosus.

Case 163, M., 5 days. | Case 164, M., 15 months.

There are no fewer than eight published cases of this malformation, but one was still-born; three were not cyanotic, in at least two of which there was compensation for the obstruction; and two others may or may not have been cyanotic, as I have not had access to the original and complete records. The specimens in the two cases tabulated above differed somewhat. In Cooper's case the aorta furnished the innominata and the left carotid and subclavian. In Schilling's the aorta furnished the two carotid arteries, and the two subclavians arose from the pulmonary artery. In both the foramen ovale was open, and the pulmonary artery, which was of large size, arose from both ventricles. This vessel, therefore, received mixed arterial and venous blood, which it conveyed partly to the lungs, partly to the trunk and lower extremities, and in Schilling's patient to the upper extremities. The aorta conveyed arterial blood to the neck and head, and in Cooper's patient to the upper extremities; in both patients the two currents being probably more or less mixed through the foramen ovale. In case 164 there is a record of the "heart's pulsations;" they "were tumultuous and rapid, and felt as a purring tremor."

Original Communications.

GUNSHOT WOUNDS OF JOINTS.

By DE WITT C. PETERS, Asst. Surg. U.S.A.

SURGEON IN CHARGE OF JARVIS GENL. HOSPITAL, BALTIMORE, MD.

The investigation and study of these injuries are at the same time the most interesting and perplexing that come under the observation of the military surgeon of the present day. The rule to amputate or even to resect a joint because it has been complicated by a gunshot wound, meets often in our practice with important exceptions. In General Hospitals, where we usually see our cases in a secondary condition, wounds of great joints require only the laws of conservative surgery to be employed in their treatment, when the results will frequently prove most gratifying. In these remarks it is not my intention to review the vast subject of these injuries, but I shall simply give my opinion in the management of several of the individual joints when wounded by missiles. At the shoulder-joint the complication may rest solely in exposing and opening to a greater or minor degree *the synovial membrane*, or we may have a compound comminuted fracturing of the bone entering into the formation of joint. There is still another class of cases where the ball (especially if it be a small-sized one) passes directly through the head of the humerus without either splitting or materially disturbing the general contour of the bone. From the battle-field of Gettysburg an interesting case of this latter series was sent to this hospital. The soldier had been wounded in the left shoulder, and, on admission, the joint and surrounding tissues were found greatly distended by healthy pus, the exit of which was partly prevented by the valvular condition of the posterior and lower wound. An operation was deemed necessary; the man was placed on the table and etherized, with the view of first making an exploration and then accomplishing what nature seemed to indicate. A straight incision was made in the course of the deltoid muscle, commencing at the acromion process and extending downwards for the distance of about three and a half inches. The incision gave free vent to a large quantity of pus and revealed the nature of the injury, viz. there was a direct opening through the head of the humerus and no true fracture. The parts were left open and dressed with simple dressings, and it has nearly healed at the present time, with every indication that the man can be again returned to active service. In all cases of wounds of the great joints we have attempted to save the limbs, with what success the annexed table will show. If the bones are comminuted a free incision is made in a favorable position; all fragments are removed and sharp spicula are trimmed with the bone forceps. The wounds are afterwards treated with the expectation of gaining a false joint, or at least anchylosis. The amount of bone resected depends on the amount of primary injury, always trying to save as much bony material as remained sound in the first instance. Our resections, therefore, are not governed by any general rules, but rather by the nature of the injuries. In a few instances the damage to the soft parts, vessels, and bony structure, has been such as to require amputation. In these cases the external appearance of the joints has been such as, by inspection, to warrant a belief that the limb might be saved, whereas the explorative operation has decided the case adversely. The probe and finger may fail (when the parts are greatly swollen and the openings small) to give us a correct idea of the state of the internal condition; but a few incisions decide the matter, and by removing the fragments, which will certainly die, the surgeon accomplishes his purpose. In speaking of gunshot wounds in general, Stromeyer justly remarks that "those cases proceed the best which are not meddled with. It would therefore appear that haste of the surgeon to do something is not always of service to his patient." This I conceive to be the error, if we are tied down by any set rules (either to amputate or resect) which are for the time-being customary. A friend* of mine, who has been a hunter of repute in the West for many years, received in a skirmish with the Black Feet Indians, a gunshot wound of the left shoulder, which completely shattered the bones of the joint; without any attention, save such as his unprofessional comrades could give him, he recovered. On examination years afterwards I could see the cicatrices, and found the head of the humerus enlarged and irregular in shape, yet by use he had overcome all obstacles and had regained the free use of the joint. Had he been seen by a surgeon when wounded, an operation would have been recommended, but certainly under it his case could not have terminated more successfully. The exposing of the cavity of any joint is a grave injury, for we all know the alarming symptoms that are prone to follow; but it appears to me that the danger is not so much due to the entrance of air as to allowing pus to be so closely confined, for the wounds of joints are in the majority of cases small, and the pus as it forms does not escape freely. Sir Benjamin Brodie recommends free incision in these cases, and my own observation has convinced me of the correctness of his conclusions. After the battle of Gettysburg we had quite a number of wounds of the knee and elbow joints, which we treated by free incisions (where indicated), rest in an easy posture, loose dressings, and constant irrigation by means of the syphon. Our men were much broken down by hard service, and had a tendency to scurvy. Notwithstanding these disadvantages they have progressed favorably. In a very few instances they have terminated fatally from pyæmia (when the wounds were of the knee-joint); still, to all appearances, for a time, they locally presented the most encouraging symptoms. The fearful omen of a chill was the first indication that warned us of the constitutional troubles we might anticipate, and which invariably terminated these cases in dissolution. The gunshot wounds of the elbow-joint, enumerated in the table, we treated by resting the limb bent at a right angle on a grooved tin splint which had been previously well padded with tow. They were retained in this position by loose bandages, the wounds were kept clean, and the patient, as soon as able, was made to exercise in the open air, and attention was paid to passive motion. The diet of these patients must be generous, and malt liquors are to be ordered them to support their strength. The diet of a soldier in the field is substantial, but it is not sufficiently mixed to be healthy; that is, he does not have the opportunity to obtain his customary amount of vegetables, and it has been found in General Hospitals, where the men are supplied with these articles, that their condition is much improved, and indeed, in most chronic complaints, a wonderful change is worked under their use. The plan of treatment to be adopted in every case of gunshot wound of the knee-joint cannot, for a variety of reasons, be so uniform as in the former series. The patient's feelings are to be consulted as to the apparatus to be used in keeping the limb and joint at rest and free from unsupportable pain. It has been our habit to give preference to either the double-inclined plane or Smith's anterior splint, and when these have not felt comfortable to the patient we have tried with success a sort of cradle where the limb rests at will on strips of bandage made fast on each side to the frame of the apparatus. The wounded part is left open and free irrigation is kept, and as the incisions close, leaving sinuses, these are cleaned daily by injections, and among the best of the latter we have found to be a weak solution of permanganate of potash. The incisions into the joint are only made when the pus accumulates so as to be distinctly recognisable and has no free means of escape. The result we hope for is anchylosis, as a false joint appears interdicted by nature, and in our endeavors to gain this end we pay particular attention to the position of the limb in order that it may be useful to the patient in after life. The cases under consideration are generally tedious in their recovery, and require an equal amount of patience and perseverance on the part of the surgeon in treating them. In the healing of compound fractures of great joints we have the opportunity of distinguishing the division made by Dupuytren of primary, secondary, and tertiary splinters of bone. The first comprise the loose fragments remaining after the injury is received, the second those still hanging to the soft parts, and the third are the result of inflammatory necrosis of the bone. The two former are removed when the operation of resection or partial resection is performed, and the latter is apt to occur as a sequel to the fracture and the operation. The thorough examination of a gunshot wound of a great joint cannot be properly conducted without placing the patient under the influence of an anæsthetic, and in hospital practice sulphuric ether is the safest, and when administered by experienced hands is equally as efficacious as any other anæsthetic. To increase its effects, and render the patient more quickly susceptible to its influence, we have preceded its use by giving the patient to drink two ounces of brandy or whiskey. By the following table it will be seen that we have treated on the principles stated in these remarks 149 cases of gunshot wounds of great joints. The success has not been as great as we would desire, yet it is such as to warrant us (in the present incomplete state of our knowledge) to a continuance of the same.

Tabular Statement of Gunshot Wounds of Great Joints treated in this hospital since June 20th, 1862.

	Side of Body.		For what Performed.			Results.								
	Right.	Left.	Gunshot Wound.	Other Causes.	Total.	Returned to Duty.	Furloughed.	Deserted.	Discharged.	Died.	Transferred.	Total.	Remaining under treatment 1863.	Total.
Wrist....	2	6	8		8		2		1	2	2	7	1	8
Elbow...	6	6	12		12	1				1	7	9	3	12
Shoulder.	24	24	48		48	5	2	1	2	3	32	45	3	48
Ankle....	15	20	35		35	3	1	1	2	2	25	34	1	35
Knee....	26	20	46		46	4	6	2	6	7	16	41	5	46
Total....	73	76	149		149	13	11	4	11	15	82	136	13	149

TREATMENT OF

GUNSHOT AND PENETRATING WOUNDS

OF CHEST AND ABDOMEN BY HERMETICALLY SEALING.

By B. HOWARD, M.D. Assist. Surg. U.S.A.

SURG. IN CHIEF ARTILLERY BRIGADE, FIFTH CORPS, ARMY OF THE POTOMAC.

No class of cases are so painfully humiliating to the military surgeon as gunshot wounds of the chest. When the call for aid is so peculiarly urgent and distressing the surgeon has been able but to lament his impotence, to hide the wound from view with a simple dressing, and sorrowfully abandon the patient to his fate. It is the appreciation of this that induces me, without waiting for properly arrayed statistics, to write prematurely from the field, and state briefly a plan of treatment which I presume will meet with very marked success, and which has already met with the general commendation of my confrères.

The most formidable symptoms of gunshot wound of the lung, and one or more of which in their proper order produce death in fatal cases, are, *Hæmorrhage*, *Dyspnœa*, and *Suppuration*.

The custom of leaving the wound open is objectionable because it affords a means of outflow as fast as the effused blood reaches its level, and thus favors the continuance of *Hæmorrhage.*

---

* Kit Carson.

It allows the full force of atmospheric pressure upon the entire surface of the lungs, and thus necessitates *Dyspnœa.*

It admits continually renewed currents of atmospheric air ensuring decomposition of the clot in the pleural cavity with extensive and profuse *suppuration* of a very fœtid character, while it does not provide for its exit until after so great an amount has accumulated as to have caused it to rise above the level of the wound; and after its partial subsidence by overflow the wound again ceases to be available.

Suppose, however, that the wound be perfectly closed, the following will at once appear among the advantages to be gained.

1st. *Hæmorrhage* is controlled. At the worst the amount of blood lost after the operation cannot be more than would suffice to fill up the unoccupied space remaining in the pleural cavity; the elastic clot resulting, furnishing a styptic par-excellance for the wounded vessels of the yielding lung.

2d. *Dyspnœa* is immediately relieved upon removal of the atmospheric pressure, and the restoration of the parts approximately to their normal condition.

The inclosed volume of air being absorbed, the lung is again at liberty to expand with its usual freedom, limited only in proportion to the size of the clot which may happen to be in the pleural cavity.

3d. *Suppuration,* if not prevented, is greatly diminished by shutting out the constantly renewed currents of atmospheric air, and its character is very favorably modified.

Indeed if the wound were closed soon enough, I deem it possible that the slough of the track through the lung, with the limited amount of attendant pus, might be entirely disposed of by absorption and expectoration. The operation which I practise is by hermetically sealing as follows:—

All accessible foreign bodies having been removed, introduce the point of a sharp-pointed bistoury perpendicularly to the surface just beyond the contused portion, and with a sawing motion pare the entire circumference of the wound, converting it into a simple incised wound of an elliptical form; dissect away all the injured parts down to the ribs, then bring the edges of the wound together with silver sutures deeply inserted, at not more than a quarter of an inch apart; secure them by twisting the ends, which are then cut off short and turned down out of the way. Carefully dry the surface, and with a camel's hair pencil apply a free coating of collodion over the wound; let it dry, and repeat it at discretion.

For greater security shreds of charpie may now be arrayed crosswise over the wound after the manner of warp and woof—saturate it with collodion, and when dry repeat the process until the wound is securely cemented over: as a still greater protection a dossil of lint may then be placed over the part and retained with adhesive straps.

If there be a tendency to undue heat in the part it may be kept down with cold affusion; should any loosening of the dressing occur an additional coating of collodion may be applied. The sutures must not be removed until healing by *first intention* is complete.

Should suppuration occur so as to occasion distressing dyspnœa, proceed to treat it in all respects as a case of empyema, introducing the trocar at the most dependent point, and taking special care to avoid the admission of air.

My first experiment in hermetically sealing was in a bayonet wound of the abdomen in a private of the 18th U. S. Infantry in 1861, which was followed by the best results. Since then I have deemed it the most eligible treatment for gunshot and penetrating wounds of closed cavities when not contra-indicated by serious complication. In incised or punctured wounds the paring process is of course dispensed with.

Practically the immediate results have been very remarkable, and I think unprecedented. The most painful cases of dyspnœa have been promptly relieved, the patient usually falling into a quiet slumber in about an hour after the operation, as in a case observed by my friends, Dr. Clements, U.S.A., Asst. Med. Director Army of the Potomac, and Dr. Taylor, U.S.V., Med. Inspector Army of the Potomac, and many others. The subsequent results, also, so far as I have been able to continue the treatment, have never disappointed my expectations.

I have obtained healing by first intention, and removed the sutures within five days after the operation. This mode of treatment by hermetically sealing has, I believe, never been practised before, though the principle of excluding the atmospheric air in gunshot wounds of the chest has been endeavored to be carried out by various expedients with relative advantages corresponding to the completeness of the occlusion effected.

Dr. Barnes, Med. Inspector-Gen. and Act. Surg-Gen. U.S.A., informs me he once treated a gunshot wound of the lung by stopping up the aperture with a conical tent made of a pouch of cloth filled with lint, its apex being fastened to a roller bandage. The dyspnœa was greatly diminished, healing by granulation took place, the case progressed unusually well, and terminated in recovery.

Neither in the Western nor Eastern Armies, however, have I seen any attempt at closing the wound; a covering of adhesive plaster or simple dressing is the only application I have seen used.

I think it will appear evident that the simple causes of fatality in gunshot wounds of the lung, and which have heretofore proceeded or abated uncontrolled by art, may each in their proper order be restrained and modified, if not prevented or removed, by the simple operation above described, which in the worst event cannot possibly incur any risk of additional harm to the patient. Though the careful continuance of the treatment so necessary to proper success be certain to be interfered with in the successive transfers of the patients to the care of different medical officers, it should not prevent the performance of the operation at any time within forty-eight hours after the reception of the wound, as it may enable the patient to survive the shock and the transportation to the General Hospital, by which time a very dangerous period will have passed.

Some cases upon which I operated were six days in the ambulances, before reaching a General Hospital, part of the road travelled being of the worst description; on the fifth day all but one of these so treated were able to walk comfortably. On their arrival all the wounds were unfortunately reopened, except when the union was too complete to allow of it, and the usual water-dressing was substituted. Yet the ratio of mortality of the whole number wounded in the lung in that engagement, and which were treated indiscriminately, was nineteen per cent. less, dating from the time the wounds were received, than that of the cases previously admitted to that hospital dating from the time of their entering the hospital. Though but five cases, their corroboration under the circumstances is valuable. When speaking of the whole number wounded, I omit one case in which I had not time to close the posterior wound from which profuse hemorrhage subsequently occurred, and in two days after which the patient died.

Camp on Rappahannock, Va. Sept. 14th, 1863.

Dr. Macdonald, agent of the Sanitary Commission, taken prisoner at Gettysburg, has just been released by the rebel authorities on parole.

Work of the Sanitary Commission.—The following list of articles was sent to Vicksburg during one week by the Chicago Sanitary Commission. The shipment involved an outlay of $9,000, on the part of the benevolent and patriotic Northwest. 200 tons ice, 1,000 bottles lemon syrup, 200 barrels soda crackers, 20 barrels dry peaches, 20 barrels dry apples, 5,000 codfish, 50 caddies green teas, 50 half barrels crushed sugar, 50 ounces quinine, 50 barrels stock ale, 100 quarter barrels stock ale, 50 half barrels stock ale, 200 musquito bars, 10½ barrels pickled cabbage, 225 palm leaf fans, and 2,000 cans concentrated milk.

REMARKS ON TETANUS, WITH HISTORIES OF NINE CASES.

By W. H. BUTLER, M.D., Acting Assist. Surgeon U.S.A.

I HAVE collected the following histories of nine cases of traumatic tetanus, the result of gunshot wounds, from the medical men who treated them, gleaning additional facts in a few cases from the patients themselves, or their attendants. Imperfect as they are, they are given to the profession not for any predetermined purpose—to support any theory; but with the conviction that they possess some value, and should be preserved.

They are of interest in connexion with the statistics of the hospital in which they have occurred. For instance, it appears that from August 7th, 1862, to April 1st, 1863, there were received into this hospital

Of sick 2918
" wounded 1228 = 4146.

During this period 7 of the nine cases occurred, and all the deaths from this disease—five;—the total number of deaths from all causes being—same period—293, or one death by tetanus to 58 by other causes.

Taking in the year the ratio is greatly decreased, viz.

Whole number of patients admitted to July 31st, 1863, 4,740.

Whole number of patients died to July 31st, 1863, 394.

One death by tetanus to 79 from other causes.

Seven of the cases were complete, *i.e.* the disease affected the jaw and muscles of the extremities: three of this number died: while of the two incomplete cases, or where only trismus was present as a marked symptom, both died.

In one case, that of Bomer, the disease seemed to be due to ligation of a nerve.

A majority of the cases have occurred among those of a sanguine nervous temperament, and mostly between 23 and 30 years of age, but one having reached 40 (Jurmo, who died).

The tetanic seizures came on at periods varying from (supposed in one case) immediately after reception of injury to 24 days after, the average of the eight cases in which it is stated being ten and three fourth days.

In 5 cases the missile was supposed to be a minié ball—in one case, "Elder's," not stated, I presume it was also a bullet; the remaining 3 being from shell, and singularly enough all recovered.

Six wounds were of the lower extremities, one of the nates, one of arm, and one not stated.

In but few of the cases, so far as the point could be ascertained, was the weather warm or moist, nor did any sudden change take place.

Four of the cases came from injuries received at the battle of Fredericksburg, December 13th, 1862, the thermometer at the U.S. Observatory, Washington (about the same latitude), indicating 39°, dew-point 34°, weather cloudy; 14th, clear and cloudy, thermometer 45°, D.P. 41°; 15th, cloudy, 56° D.P. 48°.

Two cases from Bull Run, August 30th, 1862, thermometer 67°, D.P. 58°, cloudy. September 1st, thermometer 71°, D.P. 67°.

A rain began on the 31st, which had become "heavy" on September 1st.

Three cases followed Chancellorsville, May 3d, 1863, the mercury indicating that day 65° D.P. 52°, clear; 4th, 64°—58°, cloudy and raining; 5th, 59°—57°, cloudy and raining.

It is questionable perhaps whether the state of the weather on the days I have indicated, influenced to any degree the causation of the maladies; I have mentioned it, as the facts were at my hand. In the treatment reliance has been had on opiates, a somewhat novel feature being introduced by Dr. Bowen in the administration of mustard. Judging from the general fatality of this disease, it would seem as though unusual good results had been obtained: the mortality being 5·9 only of the number attacked.

Albert W. Gallatin, Co. B, 142 Penn. Vols. Age 23. Entered Hospital Dec. 21st, 1862. Sanguino-nervous temperament, dark eyes, generally strong and healthy. His father died five years ago of apoplexy His mother is now living. He was wounded at the Battle of Fredericksburg, December 13th, 1862, by a minié ball passing in over the fifth metatarsal bone, one inch above articulation of little toe, passing inward and lodging over third metatarsal bone of left foot. After the reception of the wound it was not dressed for two days, and the foot was swollen tight in the shoe. He walked very little on it. He had no disease about him at the time. The wound was very painful, having intermissions through the day; it was generally worse at night, and he could not sleep. He had simple dressing to wound, but no medicine of any kind before he entered the hospital. Had had ordinary diet. About three weeks after the injury a few small pieces of bone came out of the wound. About January 1st, 1863, he began to have tetanic symptoms. The pain greatly increased in the foot during the day of the tetanic seizure, which came on at evening. A difficulty of breathing was first noticed, and Dr. Stanley, whose patient he was, and who was present, says he had a spasm of the diaphragm and legs, the latter stiffened out. He was given at once 1 gr. of morphia and 10 drops tr. Indian hemp, the latter to be given every three hours; warm water fomentations were applied to the wound. The second day the spasms returned more violently. He had no *opisthotonos*, but *risus sardonicus* and rigidity of arms and legs were marked. He had trismus on this and the third and fourth days for a short time each day—most at evening—and all the symptoms increased at night. The general treatment was tr. Indian hemp 10 drops as often as every three hours; ether. sulph. ʒ i. every quarter to every hour, and morphia gr. j. as the symptoms increased. The diet was principally beef tea, which was given as often as the patient would take it, a few ounces at a time. The third day Dr. S. put 30 grs. of morphia in the wound, which presented a wide open surface. The wound at beginning of disease had a bad look, and the suppuration was not healthy; considerable fœtor was noticed.

On entering the hospital the patient told the Doctor it was a shell wound; the probe did not detect any thing, and it was not suspected by either patient or Doctor that any foreign substance was present. The patient recovered in seven days. On the 25th day of January the ball (a minié) made its appearance at the orifice, and was extracted.

D. Jarmo, age about forty, of a nervous temperament, dark hair and eyes, was wounded Dec. 13th, 1862, at the Battle of Fredericksburg, a ball passing across and fracturing both tibias, and wounding or destroying a portion of both anterior tibial nerves. Entered Ward Hunter, Dr. Bowen, Dec. 20th, 1862. Pain was intense from time of injury till death. The wound had not been dressed for three days previous to entry. On admission the wounds presented a very unpromising appearance, being covered with gangrenous sloughs, and discharging a thick black offensive fluid. Several pieces of bone were removed, and gentle support given both legs by lateral splints. To the wounded and sloughing surfaces, linseed meal, charcoal and pulv. cinchonæ made into a poultice, were applied. Internally opii gr. j. every two hours; tr. cannabis indicæ f. ʒ i every three hours.

This patient had constant spasmodic twitchings of both upper and lower extremities; when he entered and after, all the symptoms aggravated at night; bowels rather constipated. Trismus was constant the last three days; had difficulty of swallowing and respiration. The spasm of the diaphragm was the first symptom noticed. There was permanent rigidity of the muscles; could not feed himself; had emprosthotonos; would bend forward in bed; died in four days after admission.

Sergt. W. B. Elder, Co. B, 91st Penn. Vols., was wounded at the Battle of Fredericksburg in the right thigh (upper third); it was amputated on the field; also by a minié ball passing through bones of wrist. Patient of good constitution; of sanguino-nervous temperament.

Admitted into Armory Square Hospital Dec. 20th, 1862, and first came under the care of Dr. Shoney—having tetanic seizures. For this the Doctor applied the direct electric current, which he thinks improved his condition; jaw not firmly set at any time; the stump suppurating and appearing in good condition. In about seven days he was transferred to Ward "K," and came under the care of Dr. Mitchell, who reports that the stump looked well and was healing rapidly, but the wound through the wrist and hand was swollen and puffy. At no time did he have opisthotonos or permanent rigidity of muscles of extremities. Risus sardonicus marked with facial twitchings. The trismus was constant. After entering Ward K there was no relaxation of the muscles of the jaw (say for the period of eight days), bowels confined, no operation except from the use of enemas every second day. For this warm water and soap-suds were used. Urine highly colored and scanty. For the first two days sulphine ether was given, which controlled to some extent the facial twitchings and trismus, but not so as to completely relax the jaw. After this he took tr. cannabis indicæ ♏. 40, increased to f ʒ i. as often as every hour, and the extract of poppy was applied to the wound of the wrist. Appetite wanting—was fed liquid food.

Death resulted in about fifteen days after entering the hospital.

William H. Bowers, aged about 23, private 1st N. Y. Battery, of nervous sanguine temperament, blue eyes, brown hair, and seemingly disposed to phthisis.

Entered Armory Square Hospital with amputated left arm at elbow, the condyles being left on. He also had wound of scrotum, the testicle exposed. Both wounds the result of shell received at the battle of Bull Run, August 30, 1862. The arm was amputated on the field three or four hours after the injury. Two ligatures were cut short inside of flap; pain was continuous from time of amputation until nerve was cut. The constant pain in the stump gave the medical officer of his ward (Dr. Bowen) the impression that a nerve had been ligated, and it was resolved on consultation to cut down and see. Dr. Bowen opened the flap, and discovered the ligature, and on tracing it along with scalpel found that the median nerve was ligated, having a large bulbous extremity, and apparently nerve matter exuding from it. The nerve was completely divided above the ligature by Dr. B. About six hours after the division of the nerve pain increased in the stump, and attacked the region of the neck and back with a feeling of rigidity of jaws. ℞. Tr. opium and tr. lupulin ʒ i., spts. eth. comp. ʒ ij. to take at once; two hours after gave the second dose. Passed a very restless night, and in the morning had inclination to vomit. The Doctor gave mustard two tablespoonfuls aquæ fervent. Oss. He drank of this nearly all; it did not produce emesis, but seemed to quiet the patient, as he soon after fell into a profound slumber, and so continued until 3 P.M. On awakening he felt relieved from all pain.

The weather at the time was warm and moist, but no sudden change occurred. The patient had spasmodic twitchings of both arms, and this was continuous, also in the muscles of the face and neck. Intellect unimpaired. Swallowing difficult, especially liquids; no appetite; pain in epigastric region. No marked trismus, but spasm of muscles of jaw. The abdominal muscles were drawn tense by the spasm—symptoms increased at night, respirations increased—cold clammy perspiration. Patient recovered from the twitchings and tetanic stiffness after 48 hours, and in four weeks afterwards stump had healed, and the man was discharged from service.

William Luke, æt. about 30, private 1st Massachusetts Volunteers, was wounded August 30, 1862, at the battle of Bull Run, by a minié ball passing through the middle third of right thigh close by the bones. Admitted in Armory Square Hospital, September 2d, 1862. Water dressing was applied for a week, the wound all the time discharging healthy pus, and not very painful. September 9th, jaws began to be stiff with some spasmodic action of muscles; for this Asafoetida, and after opium and morphine, were given for one day. Flaxseed poultice with tr. opium applied to the wound, which had become dryer. September 11, the pains and contractions of the muscles were excessive, having increased greatly in force. ℞. Morph. Sulph. gr. j. every two hours. Treatment continued on the 12th. September 13th, inhalations of chloroform were continued all day, death ensuing in the evening.

Private W. S. Galusha, Co. D, 145th Pa., admitted December 20, died December 26th, 1862. Had gunshot wound received at Fredericksburg. Had trismus twelve hours before death.

Sanford Button, age 22, priv. Co. H., 149th N. Y. was wounded by a piece of shell entering front of right thigh four inches above patella, at the battle of Chancellorsville, May 3d, 1863. Entered Armory Square Hospital, May 7th. The appearance of the wound and patient good. Bowels constipated since injury, a piece of the shell yet in the wound. Dr. Bowen, whose patient he was, thinks a small piece of shell rested on the saphenous vein in the popliteal space. The condition of the patient was not different from that of others about him; he appeared to be doing well until May 27th, when well marked trismus made its appearance. Patient desponding, tried to prevent anything being done for him, considering it useless. Sponging his lips and inhaling air produced spasm of glottis and diaphragm; bowels if anything inclined to constipation, arms and legs rigid, opisthotonos well marked. This was at seven P.M. Chloroform was administered so as to relax the spasm of the jaw, and a wooden peg placed between the teeth, and the following recipe given:—Opii tinct. ʒ ij; tr. cannabis indicæ ʒ j.; spts. ether. comp. ʒ ij.; tr. lupulin. ʒ ix.; mix, and give one teaspoonful every half hour. ℞. Sinapis ℥ ss.; aquæ bull. ℥ iv.; to drink as much as possible, or have it poured down his throat. The object of giving the mustard was not to produce emesis, but to produce relaxation of the muscles. In addition to these internal remedies three grs. sulph. morphia in solution were thrown into the wound. Treatment continued till next evening, when he had relaxation; some opisthotonos, but felt well; continued all till June 7th, the entire symptoms being relieved. Recovered, and transferred to Baltimore, June 19th.

W. H. Hiles, age 29, Sergt. Co. D, 28th Penn. Vols., was wounded by minié ball at the battle of Chancellorsville, May 3d, 1863, producing fracture of tibia of both legs, in the middle third, ball producing two wounds of exit, posteriorly and laterally, on right leg. Entered Armory Square Hospital May 7th, seven A.M., with developed tetanus. Skin healthy, tongue clean, pulse hardly perceptible at wrist, but arterial action is marked at femoral arteries; is delirious, but can be roused to answer questions correctly; thirst unquenchable; hippocratic countenance; on being spoken to, a forced smile appears on the countenance; no pain in wound except when touched; thinks he caught cold the night after he was wounded, as he was rained on lying on the ground. The wounds are black and gangrenous; have not been redressed since injury. Jaws set, bowels constipated since injury. On entering had marked tetanic spasm, affecting the whole body, producing complete tetanus; these spasms recurred half hourly with marked opisthotonos and trismus: the opisthotonos and trismus were not relaxed.

Treatment.—Removed fragments of bone, and applied cinchona and charcoal poultice, and three grs. sulph. morphia to wound every four hours, and directed forty drops of the following mixture every thirty minutes internally. ℞. Tr. opii ʒ iv.; tr. carnabis indicæ ʒ ij.; M. No effect seemed to follow from the administration of the remedies. He gradually sank and died at seven P.M. of the day of admission.

John E Tucker, age 20, sanguine nervous temperament, priv. Co. A, 17th Maine Vols., was wounded by the explosion of a shell at the Battle of Chancellorsville, May 3d, which tore away the integument crossing the gluteus muscle, together with a portion of the muscle itself.

Admitted to Ward A, Armory Square Hospital. May 8th.—Patient's health has always been good; has little pain; is cheerful and has a good appetite. Treatment (Ex. Diet); wound covered with lint wet in a weak solution of chloride of zinc, and an anodyne at night. 10th—Applied bread poultice to remove slough. 11th—Added porter to other treatment ℥ ij. every four hours. 13th—Wound becoming more painful; appetite good. Continue poultice with olive oil to raw surface. 15th—Complains this A.M. of inability to completely open the jaws; has some rigidity of the muscles of the neck, and a slight degree of opisthotonos; feels well otherwise; has no spasmodic action of the muscles; had morphia. 17th—Jaws nearly closed, can open them but little; neck stiff; has no pain or twitching of the muscles, nor difficulty of deglutition, or respiration; opisthotonos continues about the same, appetite good; wound looking well. Applied flannel wet with turpentine to neck, and covered with oiled silk; morphia gr. ½ at eight, and gr. ¼ every four hours after; milk punch ℥ s. every four hours. 18—Feeling better, can open a little more; neck not quite so stiff (continue treatment). 19th—Patient complains of application being more heating and painful. Applied cotton batting wet with olive oil to the wound. 20th—Dressed wound with wet lint; patient has not felt so well; there is a good deal of involuntary action of the muscles of the back; can take only liquid food, owing to the closing of the jaws; no difficulty of breathing or swallowing; has had more pain than usual in the wound. Dressed the wound P.M. solution morphia grs. iv. Aquæ ℥ ij., and covered with cloths wet with olive oil. 21st—Wound looks finely; slept well, can open mouth more; neck less stiff. Continue treatment; morphia gr. ½ at eight, and gr. ¼ every hour; was worse towards noon; has a good deal of involuntary movement of the muscles, jerking of the head, etc. Pulse at four P.M. 130°; has not accelerated until to-day, pulse same at nine P.M.; has taken some beef tea; has diet of milk, with milk punch ℥ j. every two or three hours; ten A.M. applied ice along the spine in a hog's intestine, to be renewed every hour. The wound was dressed with morphia gr. v. in solution at eight A.M. and at ten oclock P.M. S. quinia gr. v. every two hours. The beef tea to be crowded; milk punch ℥ j. every hour if his stomach bears it. At four P.M. he had pil. comp. cathartic. No. 4. 22d—Patient better, pulse fallen to 100°, less spasm; can open jaws sufficiently to protrude the tongue, this is covered in the middle with a pale, white, slimy coat, pale red, and thinly coated at the edge. Dressed wound morphia gr. vi. every six hours, and covered as before; keep ice to spine; keep body warm; cont. morphia gr. ¼ every hour, beef tea ad lib. P.M.—Pulse 100°; bowels moved at three P.M.; symptoms continue favorable. 23d—Pulse at three A.M. 120°; patient more restless; drank a pint of beef tea during the night. Nine A.M.—Pulse 100°; is quiet; passes urine without difficulty. 31st—Has continued to improve slowly; treatment continued; spasmodic twitchings have disappeared; trismus not so bad, pulse 111°; morphia is now given gr. ½ every two hours, and four grs. sprinkled over sore; ice to spine. June 1st—Pulse 90°; sleeps well; bowels open; trismus lessened; spasms almost ceased. 2d—Feels well; no spasms; can protrude his tongue well; the ice was stopped to-day.

The treatment from this to July 10, has been morphia gr. ½, when required, at bedtime, pills of ferri et quiniæ citras, gr. iiij. ter die; milk punch and tonic treatment generally. From inception of the tetanic symptoms, the patient has lain seven-eighths of the time with his face downwards, an attendant sitting by his side, and preventing the opisthotonos by supporting the head; this position he assumed from choice, on account of the wound.

He has had difficulty from the first in holding his urine, though it has never been retained so as to require the catheter; would often have to wait twenty minutes or more for the flow after he had the vessel in his hands.

This patient was for most of the time under the treatment of Dr. Andrews.

Received a furlough July 10th. Has been heard from since; doing well.

American Medical Times.

SATURDAY, OCTOBER 3, 1863.

INDEPENDENCE OF THE ARMY MEDICAL DEPARTMENT.

The value of the services of our profession in maintaining the strength and efficiency of armies has been acknowledged by every nation. Even in the rudest age of Grecian civilization the skilful surgeon was accounted of more importance to the army than many heroes. Parê demonstrated that fact when, by his presence, he so inspired the garrison at Metz that they made a successful defence. Every civilized nation has made the medical staff an integral part of its military organization. They regard it as the life-preserving and life-saving arm of the service. And history will bear us out in the assertion that the nation which has attached the greatest importance and given the greatest scope to the medical element of its military establishment, has been the most successful in the wars which it has waged. It is a fact easily demonstrated, that many a campaign has failed that would otherwise have proved brilliantly successful, through the neglect of those sanitary regulations which the educated surgeon could suggest and apply, if unfettered by the restrictions which, in his subordinate position, too often surround him.

If the teachings of history and experience are of any value in directing human affairs, it would seem that they ought to lead civilized nations to place the very highest estimate upon the military medical service. It should not only have free play to fulfil its obvious mission of life-saving upon the battle-field, but it should still more importantly be allowed to dictate, or even to command, the conditions on which it discharges its higher obligations of health-preserving, in the camp or in the field. And yet, modern nations, with rare exceptions, present the singular anomaly of consigning the most powerful element of their military organizations to an inferior and subordinate position, where it has neither the right nor the power to exercise fully and freely its humane vocation. The Government of France has made large advances in the recognition of the rights of the medical department of its army. It has given rank to its officers, and rendered it in many important respects independent in its action. The British Government was forced to a recognition of the value of the medical services to the army of the Crimea, and successful efforts were made to place its medical department on a more independent footing.

Our own Government seems less disposed than any of its contemporaries to listen to the voice of reason and experience. The medical department of its army remains where the present war found it, entirely subordinate to other authorities. In its present position it may become the sport of every political trickster, and be perverted to the accomplishment of partisan purposes. Repeatedly during the present war has it become painfully evident that the Medical Bureau must be more or less completely emancipated from the jurisdiction of State Departments before it can fully accomplish its humane mission of health-preserving and life-saving in the army. Higher officers of Government, having no just appreciation of the duties of the medical service, have controlled the department so as to destroy the efficiency of branches of its organization. A striking but not an isolated example is found in the organization of the Bureau of Medical Inspection. This was a new and most important branch of medical service, requiring for its proper and successful performance persons skilled in sanitary science. And the law expressly provided that the appointments should be immediately made (to give no time for political influences to dictate them), and persons should be selected only from merit and special qualification. Both the regular and volunteer medical staff contained officers of this stamp. But in palpable disregard of law and justice, the nominations were withheld for six months. And, finally, to complete the work of demoralization, a person was placed at the head of the bureau without a solitary qualification to recommend him. If rumor is correct, the appointments were finally thrown into the political lottery. Good names indeed were drawn, but they were in the minority. In the same manner incompetent persons have been forced into the medical staff in defiance of examining boards and protests of the Surgeon-General. In great emergencies, like that occurring at the second Bull Run battle, the existence even of a Medical Bureau has been overlooked, to the infinite detriment of the public service. In like manner important hospitals have been broken up without a word of consultation with the medical authorities. These are but examples illustrating the manner in which the central office of the Medical Department is hampered, and its efforts nullified by powers which from necessity cannot appreciate its requirements.

If we extend our inquiry to the field, we find the medical department laboring under similar embarrassments. It has neither rank nor power adequate to its importance. It is dependent upon other branches of the service for the means of discharging its duties, and must await their convenience. Its stores cannot be moved, its hospitals cannot be built; in a word, it can do nothing without the aid of the quartermaster. Innumerable are the instances in which the medical service has been completely foiled for want of independent action.

We have noticed but a few of the clogs and hindrances to the free and efficient action of the Medical Department of our army. But they will prove sufficient to convince the most sceptical of the necessity of erecting it into an independent branch of the military service. Nothing but the sagacity and persistent energy of Surgeon-General Hammond has enabled the medical department to surmount the obstacles which impede its action, and achieve that measure of success which the soldiers and the people so gratefully acknowledge.

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THE WEEK.

The English Medical Council have issued the following important recommendations in regard to the primary education of students:

"1. That all students pass an Examination in General Education before they commence their professional studies.

"2. That the time of commencing professional studies shall be understood to be the time of commencing studies at a medical school, and that no qualifying body be held to have complied with the recommendation of the Council which shall allow the Examination in General Education to be passed after the commencement of professional study.

"5. That no certificate of proficiency in General Education, which does not affirm the proficiency of the candidate in Latin, be deemed a sufficient proof of Preliminary Education previous to the commencement of professional studies.

"7. That without professing to lay down any complete scheme of General Education for persons intending to become members of the medical profession, the Committee recommend that the scheme of Examination in Arts of the licensing bodies be, as nearly as practicable, similar to that of any of the national educational bodies."

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Surgeon-General Hammond has completed the inspection of the Department of South Carolina, and is about to proceed to the Department of the Gulf. This inspection will lead to many important improvements relating to the hygiene of the troops, and we can but congratulate the army of that department on the visit of the Surgeon-General and his personal inquiry into its condition. There is even more need, we believe, of the presence of the Chief in the Medical Department of the Gulf. Medical affairs have not proceeded smoothly there, nor has the health of the army been above criticism. It will require, doubtless, but the presence of the Surgeon-General and his suggestions to rectify errors.

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We call the especial attention of those of our readers who are interested in Military Surgery to the article on gunshot wounds of the chest by Dr. B. Howard, Asst. Surgeon U.S.A. The plan of treatment proposed by him is rational, and commends itself for a fair trial. We understand that the Surgeon-General has ordered, at the next engagement of the Army of the Potomac, that a hospital shall be organized under charge of Dr. Howard for the sole purpose of treating gunshot wounds of the chest by the sealing process. The results of his experience will be of great interest to the profession.

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The N. Y. County Medical Society will hold its anniversary meeting Oct. 5th, 1863, at which time the election of officers will take place. This society deserves great credit for the activity it has displayed for some time past, and we hope that it will continue to manifest its accustomed zeal in matters which interest the profession. In order to insure this end the officers to be elected should be representative men. Among its members there are plenty who are capable of occupying any office of trust which the Society has at its bestowal, and the members should see to it that none others are chosen.

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Consumption of Spirits and Wine.—The quantity of home-made spirits retained for consumption as beverage in the United Kingdom in the first half of the year 1863 was 8,946,498 gallons, which is almost precisely the same quantity as in 1862, but 200,000 gallons less than in 1861. There were also 121,958 gallons of methylated spirits. The account of foreign spirits entered for home consumption is made up to the end of the first seven months of the year; the quantity was 2,872,879 gallons,—an increase of above 100,000 gallons over the first seven months of either of the two preceding years; the increase is in brandy.—*Medical Times and Gazette.*

Reviews.

A Treatise on Hygiene, with Especial Reference to the Military Service. By William A. Hammond, M.D., Surgeon-General U. S. Army; Fellow of the College of Physicians of Philadelphia; Member of the Philadelphia Pathological Society; of the Academy of Natural Sciences; of the American Philosophical Society; Honorary Corresponding Member of the British Medical Association, etc., etc. Philadelphia: J. B. Lippincott & Co. 1863. 8vo. pp. 604.

(*Continued from page 150.*)

"The present rebellion," says Dr. Hammond, "has opened our eyes to the evils flowing from the indiscriminate enrolment of men unfit, by reason of physical infirmities, to undergo the hardships incident to a soldier's life." And he states, that in a hospital under his charge in the early part of the war, containing six hundred patients, he discovered at one time, on inspection, fifty-two cases of inguinal hernia. But the evil of such neglect of proper medical inspection of recruits has been partially remedied, and great effort is being made to insure the faithful execution of the duties of medical inspection of recruits and drafted soldiers. The first chapters of this treatise will essentially aid the inspecting surgeon and the medical officers of the Boards of Enrolment. The questions relating to *age*, *stature*, *chest—capacity*, *weight*, *constitution*, are practically considered; and, in the second, the more important points relating to qualification and disqualification are presented.

In his chapter on Race, the author furnishes some interesting facts respecting the American Indian and the Negro. His own observations have convinced him of the "manifest inferiority of the American Indians to the whites in muscular strength." And of the negro he states that, "by transferring him to a temperate climate he has positively lost rank physically." The causes of such degeneration of the negro are worthy of more exact inquiry than has hitherto been instituted. It is true, as Dr. Hammond states, that brought to a climate like ours, "the negro becomes tuberculous, just as do lions, tigers, and monkeys, which are transported out of their native land;" but are there not other and more active causes of this degeneration? There is reason for believing that in addition to that tendency to physical degeneration which has been manifested by the African when in an abject condition, and especially when transported to a foreign land, there has been a more far-reaching influence to such degeneration in the shameful amalgamation of this race with the races of the most remote ethnological realms. This important and demoralizing cause of the physical degeneration of races, is fully admitted by the author of this treatise. He states that half-breed Indians are less robust and less prolific than their pure-race progenitors; and that "it is generally the case that the children of parents, *both mulattoes*, are sterile." In discussing this question of the influence of the intermarriage of races, the author states that, "a mixture of the blood of different nations of the same race is better than either of the parent stocks. Those nations are furthest advanced intellectually and physically which are most thoroughly composite in their character." And he remarks, "that numerous examples of the improvement of races have been furnished in the history of the world;" and that "in the United States we have the most striking example of all. Who can doubt that the activity both of mind and body, the ceaseless energy, the superb physical development of the people, are due to the commingling of the blood of all the nations of Europe? To be an American is to be a cosmopolitan."

The frontispiece of this volume presents the strongly contrasted physiognomical peculiarities of the eight realms or races of the human species, and the political economist and philanthropist may profitably press forward in inquiry and legislation, in reference to the physiological and moral obligations of diverse realms of man; for the advancing light of ethnological and physiological science, as well as the interests of civilization, particularly in the United States, would seem to warrant legal measures for preventing the further ruinous amalgamation of the negro and the white bloods.

In the remaining nine chapters of the second section, the author examines the questions relating to Temperament, Age, Sex, Hereditary Tendencies, Habits, Constitution, etc. Passing these topics, we come to the twenty-nine well arranged chapters respecting *Agents External to the Organism which act upon the Health of Man.* The air, light, clothing, and aliment; the hygienic functions they affect, together with the scientific and economic relations they sustain, are leading themes of inquiry in this principal and most practical section of the book; and they are discussed and elucidated in a style of scientific exactness, clear and practical generalization, and ready application to specific objects, which has so decidedly characterized Dr. Hammond's physiological writings from the commencement of his career as an author. We propose to examine the several chapters of this section of the treatise somewhat in detail, for they comprise the questions that most concern the hygienist and the military medical officer.

The Atmosphere and its Non-Essential Constituents.—From his own experiments and examination of evidence in reference to the contamination of crowded apartments, Dr. Hammond concludes that not only carbonic acid gas, but the organic matter exhaled from the living body, is most at fault in poisoning the air of close and crowded quarters.

The following experiment, like Regnault's, seems to prove that carbonic acid cannot be regarded as an absolute poison:—

"I confined a sparrow under a large bell-glass, having two openings. Through one of these I introduced every hour 1000 cubic inches of an atmosphere, containing 45 parts of oxygen, 30 of nitrogen, and 25 of carbonic acid, allowing the vitiated air which the animal had respired partially to escape. At the end of twelve hours the bird was in as good a condition as at the commencement of the experiment, and when the bell-glass was raised it flew away as if nothing had happened to it. A mouse subjected to a similar experiment also suffered no inconvenience."

The vital importance of cleansing the atmosphere of hospital wards, barracks, and crowded transports, of the effete or exhaled organic matter that accumulates in such places, needs to be kept in view in all plans for their ventilation. The organic matters exhaled from the human body, when such effete elements accumulate to a certain degree, unquestionably act poisonously and with deadly certainty. Hence the necessity of such means of ventilation as will secure effectual perflation of the air which immediately surrounds the person, the bed, etc. From our own observations and practical convictions upon this subject, we could wish that Dr. Hammond had even more fully illustrated its applications in his excellent chapter upon Ventilation. But in no other hygienic treatise do we find the chemistry of the atmosphere and the rationale of air-supply or ventilation so lucidly treated. The chapters devoted to hospitals and hospital construction largely develop the advanced views and accurate knowledge which the author of this volume is admitted to possess.

Repeating and verifying many experimental observations upon the more important accidental constituents of the atmosphere, Dr. Hammond has found sulphureted hydrogen to be exceedingly deleterious to animal life. His experiments verify those of Dupuytren, that an atmosphere contaminated by 1-800th of this gas proves fatally poisonous to small animals in a few seconds; and that "these animals, if placed under a bell-glass containing pure sulphureted hydrogen, died immediately, without any convulsive action." Also, that "on post-mortem examination the blood was found perfectly dissolved, and the blood-corpuscles completely broken down." His experiments with ozone show, that, while it is powerfully antiseptic, even so small a proportion as 1-1000th part of this allotropic oxygen, when mixed in the atmosphere, will destroy the life of mice or other small animals. Generally, his experiments have verified those of Schönbein, and he says: "There is every appearance that a vast field of inquiry exists in this direction, the investigation of which cannot fail to enlighten us relative to the causation of many diseases which now defy our utmost power of research."

Dr. Hammond's observations upon the organic matters found in the atmosphere, under the various circumstances that concern the hygienist, are replete with practical suggestion. Though scattered through several chapters, we will refer to them here. The improved and delicate means of estimating the presence and quantity of organic matter contaminating the air, the relations which such matters sustain to the etiology of various diseases and their localizing causes, and the importance of specific sanitary measures for neutralizing or destroying the morbid effects of such adventitious morphological and putrefactive elements of the air we respire, warrant the hygienist in striving to obtain a more perfect knowledge of these sources of insalubrity. The following quotations, from scattered paragraphs on this subject in the volume before us, will present points of special interest to every reader:—

"The various living animals and vegetables of the earth give off emanations from their bodies, either in a gaseous or morphological state, which are received into the atmosphere, and affect in greater or less degree the hygienic condition of man. To the organic matters emanating from the human body, more than to any other cause, the injurious results of overcrowding are to be ascribed. * * * They are absorbed by the clothing, the bedding, the carpets, the curtains, and many other materials, and even the walls of the rooms inhabited take them up and retain them for a long time. * * * * * The emanations from the human body are of a decidedly deleterious character when present in large amounts in the atmosphere inhaled. * * I have collected the water given off by the lungs and skin, and have always found it to contain organic matter, as indicated by the solution of permanganate of potassa. Moreover, the fact that this water undergoes putrefaction very readily, is another evidence that it contains organic matter.

"When we enter a room in which many persons are contained, we are struck with the oppressive character of the air. That it is not altogether due to the presence of carbonic acid, is very apparent from the peculiar odor which is evolved. The same is true of a chamber in which any one has slept, and which has not yet been purified by ventilation, or of the bed which has been lain in."

Having quoted a variety of illustrative instances of fatal diseases and sudden deaths from respiring air charged with organic matters, the author says: * * My own experiments are to the same point. I confined a mouse in a large jar, in which were suspended several sponges saturated with baryta-water; by this means the carbonic acid was removed as fast as formed, as was proven by the fact that on causing a portion of the air in the bell-glass to pass through baryta-water no carbonate of baryta was formed. Fresh air was supplied as fast as was required, by means of a tube communicating with the bell-glass and closed by a little water in the bend of the tube, which acted as a valve. * * * The watery vapor exhaled by the animal was absorbed by two or three small pieces of chloride of calcium. * * * The mouse subjected to this experiment *died* in forty-five minutes. The observation was repeated many times, and death invariably ensued in less than an hour. On causing the vitiated air to pass through a solution of permanganate of potassa, the presence of organic matters, in large quantities was at once demonstrated.

"There can be no doubt, therefore, that the organic emanations from the bodies of man and other animals, in a condition of comparative health, are positively noxious, or that too much care cannot be taken to rid our habitations of them. When persons not in sound health are crowded together, we can at once perceive that the exhalations given off from their bodies are possessed of still greater deleterious properties. * * The exhalations in question cling to the clothing, the furniture, the walls, and especially the bedding."

In his chapter upon the ventilation of hospitals, the author has succeeded in giving an unusual degree of exactness and practical value to all the statements respecting the causes and elements of contamination of the atmosphere in wards and habitations. Concerning the organic and putrefactive matters found in the atmosphere he states:

"I placed an exhausting apparatus, connected with a set of Liebig's bulbs, containing a standard solution of permanganate of potassa, in a room which had been, immediately before, thoroughly aired. The apparatus was set in action, and it was found that it required 1085 cubic inches of air to pass through the solution in order to decolorize it. * * * The windows and doors of the room were now closed, and it was not entered or opened for ten days. At the end of that time the apparatus, above described, was introduced and put in operation. It was now found that 725 cubic inches of air were sufficient to effect a complete decolorization of the solution. * * * * * * * * I have recently examined the wards of several military hospitals. * * * * The ridges were open, and an abundance of fresh air entered through the openings in the sides of the wards. * * * * With regard to the amount of organic matter present, my observations led only to comparative results, but they accorded very closely with those relating to the proportion of carbonic acid present. A solution of permanganate of potassa—which was decolorized in the open air only after 1353 cubic inches of air had passed through the arrangement—was, in the hospital which contained the least amount of carbonic acid gas in the atmosphere, decolorized by 801 cubic inches" [the carbonic acid being 0.68 parts in 1000 of the air], "and in that which contained the most"—[viz. 2.11 parts of carbonic acid in 1000]—"by 617 cubic inches."

It is a crowning excellence of this treatise that while every chapter and every paragraph bears testimony to the utilitarian design of direct and humane applications, the more important scientific questions are examined in such a thorough and comprehensive way as at once to interest the scientific reader, and throw new or more certain light upon sanitary science and the art of health. The foregoing quotations well illustrate this.

As the reader may profitably examine all that Dr. Hammond has written upon these physiological questions, we will here refer to the results obtained by Dr. Angus Smith, and which are in every respect confirmatory of Dr. Hammond's experiments upon the organic matters found in wards and habitations.

Employing permanganate of potassa as the chemical test, and making close approximative estimations, Dr. Smith found in the open country north of Manchester, England, 1 grain of organic and putrefactive matter in 209,000 cubic inches of the atmosphere. In a house in an insalubrious section of the city he found 1 grain of organic matter in 16,000 cubic feet of air; behind the house, 1 grain in 8,000 cubic feet; while in a close packed railway carriage he found 1 grain in 8,000 cubic feet, and likewise the same large proportion in his own laboratory when the effluvia of a sewer were regurgitating into the apartment. [*See Quar. Journal of the Chemical Society*, vol. x., pp. 221–224.]

That the diligent pursuit of investigations in this direction will, ere long, be rewarded by the discovery of definite facts of greatest importance in the etiology and the hygienic treatment of pestilent diseases, there is strong reason to hope. The microscope has already revealed epithelial and pus cells, and the spores of various fungi floating in the atmosphere under particular circumstances. Dr. Hammond has given a very neat illustration of the method he has pursued in searching the atmosphere for such accidental elements contaminating the air of hospitals and other places. His apparatus is similar to M. Pouchet's, and he states that he has frequently obtained the spores of the penicillium and other mucedines. His investigations and nice tests of the local atmosphere of close apartments and insalubrious localities have elicited some interesting questions, and have shown what a tempting field invites the studies of medico-micrologists. But, as we view this subject, the discovery of cryptogamic and infusorial organisms constitutes but one of the less important steps in the progress of that severely inductive inquiry which shall unfold the fundamental facts concerning the essential nature and etiological history of morbid poisons and specific miasmata, and the diseases they induce. The author of the treatise before us has manifestly appreciated the practical bearings of such inquiries. In a few paragraphs he has very clearly set forth what is known upon this subject; and we admire the style and matter of his treatment of this and other abstruse and hitherto conjectural themes of speculation, though, personally, we yet regard the pleasant theory of our friend, the late Prof. J. K. Mitchell, respecting the cryptogamic and infusorial causes of disease, as that distinguished observer once advised us, privately, to do; viz. simply as a convenient *ladder* or *scaffolding* to enable us to reach, as well as to deposit, new facts in the temple of scientific truth.

We notice that Dr. Hammond has adopted the very *apparently* complete arguments that have recently been presented by a western gentleman, respecting the origin of Measles from a peculiar fungus that springs up in moistened straw. We confess that various circumstances which we need not mention tend to obstruct our faith in the conclusions that seem to be so legitimately, and with such remarkable completeness and beauty, set forth in the illustrated communications upon this subject, in the *Am. Medical Journal* last year. Upon reflection, it must appear somewhat improbable that the lumbermen of Maine, Pennsylvania, and Minnesota, who have bunked in mouldy straw from boyhood, should be the first to contract measles from beds of like material in military encampments.

Dr. Hammond records the interesting fact, that he finds in a malarious atmosphere immense quantities of mycetous and other fungi, some of which he designates. And he believes that he once contracted an intermittent fever by exposure to musty hay, which his military superiors required him to inspect.

The chapters on Temperature, Light, Electricity, Water, Soils, Climate, and Acclimation, precede the chapter devoted to Hospitals, etc. Each of those chapters embodies some striking facts drawn from the history of the present war. Illustrating the sanitary relations of temperature he presents a tabulated and comparative statement showing the mortality ratio in five of the national armies during each of the last six months of 1861, and of the first six months of 1862. He states that "the sickness and mortality of the United States forces have, since the commencement of the rebellion, been much less during the winter months of the year than during those of summer." His remarks upon the standard temperature of Hospitals, and the proper means for insuring it, are timely and important.

The hygienic uses of water, and the proper methods for its purification, testing, etc., are very fully described. This chapter is of the greatest practical value, and the information and suggestions it embodies will do good service. It would form a most valuable and popular monograph, worthy the Sanitary Commission's list, for general circulation in the Army.

(*To be Continued.*)

A Generous Donation.—J. Baxter Upham, M.D, of Boston, has lately made the liberal donation of $600 in trust to Mrs. Gen. Foster, to supply with wine and other luxuries, the sick and dying soldiers of the Stanley Hospital, Newbern, N. C., at present superintended by eight Sisters of Mercy from New York.

Army Medical Intelligence.

ORDERS, CHANGES, &c.

The resignations of Surgeons S. M. Hamilton and William Moss, U.S.V., have been accepted by the President.

A Military Commission to consist of Surgeon Tripler, U.S.A., Major C. P. Kingsbury, Ordnance Department, and Captain C. C. Pomeroy, 11th U.S. Infantry, has been appointed to meet at Chicago, Illinois, on the 1st day of October, 1863, or as soon thereafter as practicable, for the purpose of examining and reporting on the following subjects:

1st. The alleged abuses in relation to the supplies of the City General Hospital at Chicago.

2d. The abuses relative to pay received for soldiers' discharges at the City General Hospital.

3d. Everything connected with the management of the City General Hospital, during the time it has been occupied as a military hospital.

So much of Special Orders, No. 382, August 26th, 1863, from the Adjutant-General's Office as honorably discharged from the service of the United States Surgeon T. P. Gibbons, U.S.V., in accordance with General Orders, No. 100 of 1862, from the War Department, for being absent from duty for over sixty days, has been so amended as to honorably discharge him from the service of the United States, on account of physical disability.

So much of Special Orders, No. 302, series of 1863, from the Adjutant-General's Office, as mustered out of service Surgeon William Arnold, 37th Ohio Volunteers, to date January 6th, 1863, the date at which he was mustered in, is hereby revoked, and he is honorably discharged the service of the United States, to date July 31st, 1863, he having shown satisfactorily that he performed duty up to that date.

Surgeon T. A. Worrall, U.S.V., will report in person without delay to the Medical Director, Department of the East, for duty.

Leave of absence has been granted to the following Officers:—

Acting Assistant-Surgeon Geo. S. Rose, U.S.A. for twenty days.

Assistant-Surgeon J. C. Allen, 12th Pennsylvania Cavalry, for seven days.

Assistant-Surgeon C. H. Haeseler, 20th Pennsylvania Cavalry, for seven days.

Acting Assistant-Surgeon Maurice Tucker, U.S.A., for ten days.

Assistant-Surgeon L. S. Comstock, 115th New York Vols., for thirty days.

Surgeon Thomas W. Fry, U.S.V., Superintendent of Hospitals at New Albany, Ind., has been ordered to close General Hospitals Nos. 1, 2, and 3, in that city.

Drs. Kenneth Wharry, Lyman Allen, W. A. Spears, H. C. Merryweather, and W. Pryor, have been appointed Assistant-Surgeons to the 4th, 5th, 3d, 5th, and 1st Regiments U.S. colored troops, respectively.

Dr. G. V. R. Merrill, Elmira, N. Y., has been appointed Assistant-Surgeon 6th Regiment U.S. colored troops.

Dr. A. P. Reichhold, late Acting Assistant-Surgeon, U.S.A., has been appointed Surgeon of the 4th Regiment U.S. colored troops.

Surgeon A. T. Augusta, U.S. colored Vols., has been transferred to the 7th Regiment U.S. colored troops

Surgeon J. V. Z. Blaney, U.S.V., has been relieved from duty in the Department of Virginia and North Carolina, and ordered to report in person to Brigadier-General Kelly, U.S.V., commanding Department of West Virginia, for duty as Medical Director.

The following named Medical Officers have been ordered to rejoin their regiments in the Army of the Potomac without delay:—

Surgeon H. W. Grominger, 16th Pennsylvania Cavalry.
Assistant-Surgeon A. F. Herman, 16th Pennsylvania Cavalry.
" A. J. Coles, 11th Pennsylvania Reserve Corps.
Surgeon J. D. Osborne, 4th New Jersey Vols.
Assistant-Surgeon H. Gross, 26th Pennsylvania Vols.
" J. D. Sturdewant, 139th Pennsylvania Vols.
" G. J. Townsend, 72d New York Vols.
" W. F. Breakey, 16th Michigan Vols.
" G. J. Townsend, 72d New York Vols., has tendered his resignation on account of physical disability.

Drs. Rudolf Tanszky, of Hungary, and Geo. S. Rose, of Pennsylvania, have been appointed Assistant-Surgeons of Volunteers.

Reverend William Y. Potter, having been drafted into the service of the United States, is hereby assigned to the special duty of visiting and inspecting the hospitals in and near Washington and Alexandria.

Upon the recommendation of the Board of Examiners Surgeon Thomas J. Dunott has been honorably discharged the service of the United States, on account of physical disability, with condition that he shall receive no final payments until he has satisfied that he is not indebted to the Government.

So much of Special Orders No. 335, June 28, 1863, from the Adjutant-General's Office, as directed Surgeon R. B. McCay, U.S.V., to proceed without delay to Santa Fé, N. M., and report in person to Brigadier-General Carleton, U.S.V., commanding Department of New Mexico, has been revoked, and Surgeon McCay will report in person to the Surgeon-General, U.S.A., in Washington, D.C.

The following assignment of medical officers has been made:—

Surgeon J. W. Lawton, U.S.V., now in charge of the U.S. General Hospital at Gallipolis, Ohio, will report in person to the Medical Director Department of the Cumberland, to relieve Surgeon William Clendenin, U.S.V.

Surgeon Clendenin, as soon as relieved by Surgeon Lawton, will proceed without delay to Clarksburg, Va., and report in person to Brigadier-General Kelly, U.S.V., commanding Department of West Virginia, for duty.

Surgeon George H. Oliver, U.S.V., now at Baltimore, M.D., Assistant-Surgeon George S. Courtwright, U.S.V., now in Department of the Ohio, Assistant-Surgeons Rudolf Tauszky and George S. Rose, U.S.V., to proceed without delay to Santa Fé, N. M., and report in person to Brigadier-General Carleton, commanding Department of New Mexico.

By direction of the President, Surgeon Matthew McEwen, 2d Virginia Cavalry, has been dishonorably dismissed the service of the United States, for misapplication of hospital property, selling whiskey to soldiers, and making false statements in relation to purchases.

Original Lectures.

CYANOSIS.

By J. LEWIS SMITH, M.D,

PHYSICIAN TO THE ORPHAN HOME AND ASYLUM, LECTURER IN THE UNIVERSITY MED. COLLEGE.

[Being a Paper read before the N. Y. Academy of Medicine, February 18 and March 4, 1863]

PART V.

UNCERTAIN CASES.

Case 165, M. 12 yrs.
" 166, M. 10 mos.
" 167, M. 21 yrs.
" 168.
" 169, F. 2 weeks.
" 170, F. 12 hours.
" 171, M. 16 years.
" 172.
" 173, 30 hours.
" 174, M. 18 years.
" 175, M. 40 "
" 176, M. 24 "
" 177, F. 20 "
" 178, M. 20 mos.
Case 179, 7 weeks.
" 180, 11 months.
" 181, 10 weeks.
" 182. F. 7 months.
" 183, F. 4 weeks.
" 184, 7 months.
" 185. F. 12 years.
" 186, F. 18 "
" 187. F. 34 "
" 188, F. 9 "
" 189. F. 24 "
" 190. F. 36 "
" 191, F. 15 "

There may be anatomical errors or vices producing cyanosis which differ from those mentioned; but from the rarity of such it is safe to refer any case of this disease to one or the other of the above malformations. It is probable the art of diagnosis will never be so perfected that the nature of the malformation can be accurately diagnosticated from the signs or symptoms.

The fact must not be overlooked that these malformations are sometimes present without cyanosis. This is evident from the statement previously made, that the blue disease may not appear for months or years, although it depends on a congenital defect of structure. In many, probably most of these cases of the non-appearance or deferred appearance of cyanosis, there is some mode of compensation, which usually is such as increases the flow of blood to the lungs. The following may be mentioned as examples. Dr. Quain presented to the London Path. Soc., May 5, 1857, the heart of a child who died at the age of ten months. There does not appear to have been lividity, so far as can be determined from the history. The heart was in the condition described in the first malformation. The orifice of the pulmonary artery was so small as to be practically obliterated, and the aorta was of twice the usual size. "From the posterior third of the arch, and from about one inch of the descending aorta, branches, three on each side, were given off to the lungs. The middle branch on the left side communicated with the pulmonary artery, which was pervious, except at its origin." These branches evidently compensated for the obstruction at the mouth of the pulmonary artery.

Another case was related by Dr. Sieveking, before the London Path. Soc., November 1, 1853. The infant lived six weeks. The tricuspid orifice was closed, so that there was no direct communication between the right auricle and right ventricle, and between the auricles was an aperture large enough to admit the first phalanx of the finger. The left ventricle was hypertrophied, so as to form nearly the entire ventricular portion of the heart, and it gave origin to both the aorta and pulmonary artery. To the right of this ventricle, and opening into it, was a small cavity, evidently the rudiment of the right ventricle. The pulmonary artery was twice the size of the aorta. The state of the heart in this patient was similar to that described under the head of *Second Malformation*, there being this difference between this case and those in which cyanosis was present, that the pulmonary artery was so enlarged as to receive two-thirds of the whole amount of blood at each ventricular systole. The blue disease appears to have been prevented by this enlargement of the pulmonary artery and the consequent increased arterialization.

Dr. Peacock related before the same Society, October 17, 1854, the history of a child, eight months old, who was not cyanotic, but during attacks of dyspnœa had slight lividity about the face. Both auricles opened into the left ventricle by separate orifices. This ventricle gave origin to the pulmonary artery, which measured twenty-four lines in circumference. A crescentic opening led from this ventricle into the right, from which the aorta arose only fourteen lines in circumference. In this case, as in the one just related, there must have been almost a complete admixture of the two currents of blood. As both auricles opened in the same ventricle there were virtually but three cavities, as in the *Sixth Malformation*, and, besides, the large arteries were transposed. In this case cyanosis seems to have been prevented by the relatively larger size of the pulmonary artery than of the aorta, and its more favorable location, so that the pulmonary current must have been considerably larger than the systemic.

In the Medico-Chir. Trans., vol. xxv., Mr. Fletcher relates the case of a female patient, nineteen years old, in whom the aorta was constricted at the ductus arteriosus, so as to be not more than one-ninth of the size of the ascending portion. The *Fourteenth Malformation* was present, but the internal mammary arteries, which were of extraordinary size, established a collateral circulation, and compensated for the obstruction. In the Medico Chir. Trans., vol. v., p. 287, a similar case is published by Robert Graham, M.D. The patient, a male, attained the age of fourteen years, and followed the occupation of weaver. In this case the aorta was impervious at the ductus arteriosus, but the intercostal arteries were found enlarged, and as these by anastomosis unite the portions of the aorta each side of the ductus arteriosus, it is evident that they supplied the deficiency in the aorta, so that the patient, instead of being livid, had a florid complexion.

And this leads us to speak of compensation in cases of cyanosis, a subject of great interest, but to which few observers have given attention. It is evident that modes of compensation, which are sometimes sufficient to prevent cyanosis, may in those cases in which cyanosis is present serve to moderate it and lead to the prolongation of life. The following may be mentioned as examples:—

In a cyanotic male patient, treated by M. Jacobson (No. 75), the pulmonary artery was not more than one-fourth the size of the aorta, and its orifice was greatly contracted by thickening of its valves. "But to compensate for this the bronchial arteries were very much enlarged; three of these vessels passed off from the right and left sides of the aorta to the lungs, and a branch was distributed to either lung from the pericardial artery."

Mr. Le Gros Clark published in the Medico-Chir. Trans., vol. xxx., the history of a male patient (No. 117), nineteen years old, in whom cyanosis was produced by a supernumerary septum in the right ventricle, but there was this mode of compensation: "bronchial arteries unusually large and tortuous, and the branch from the internal mammary artery, which accompanied the phrenic nerve, was nearly equal in size to the parent trunk, and expended itself principally in the adjacent adherent lung." In No. 150, described by Tiedemann, the bronchial arteries were also greatly enlarged, and after being injected were traced everywhere into the lungs.

The intercostal, internal mammary, and bronchial arteries, are not likely to be noticed in an autopsy, and from the above observations it is probable that they are often enlarged in cyanosis, so as to take on a vicarious function. The increase of muscular fibres in the heart, the presence of apertures in the septa to relieve the congestion, and especially the development of insignificant arteries, so as to answer an important purpose in the circulation, afford a striking exemplification of the wonderful resources of nature in obviating defects.

Although in nearly all cyanotic patients there are direct communications between the two sides of the heart, it is shown by many observations that these communications or apertures are not sufficient in themselves to produce cyanosis. This opinion was expressed nearly forty years ago by Louis, who published an excellent monograph on the subject of these communications, basing his remarks on an analysis of twenty cases. Since the publication of this paper the belief has been pretty general in the profession, and observations continue to substantiate it, that although the apertures may be of considerable size, if the two sides of the heart, with their orifices and vessels, are in their normal state, so that they act symmetrically and without obstruction, and there be nothing to disturb their regular action, cyanosis will not occur. In proof of the correctness of this opinion many cases might be cited of a pervious, and some of a largely dilated foramen ovale without the cyanotic hue, cases which have been published in the journals since the appearance of Louis's monograph. To remove any doubt which may exist on the subject, the following may be mentioned as striking examples in which the inter-auricular or inter-ventricular septum or both were incomplete, without the occurrence of cyanosis:—

In the L'Experience, January, 1838, is the history of a shoemaker, who died at the age of twenty-six years, of pneumonia. He had always suffered from palpitation. The heart was very large. "All the cavities and orifices were very wide and open." The foramen ovale was closed, but the inter-ventricular septum was deficient to the extent of an inch in diameter. In the London Med. Gazette, April 21, 1843, quoted from the Trans. of the King's and Queen's College, Dublin, is the history of an individual in whom the inter-auricular and inter-ventricular septa were both virtually absent, without the occurrence of cyanosis.

Dr. Hare presented to the London Path. Soc., April 17, 1848, the heart of a female infant, who died of pneumonia, at the age of five months. The septum between the auricles was perfect, but that between the ventricles had an aperture half an inch in diameter. Dr. Hare also gave the history of another case, in which the foramen ovale was pervious, and there was an aperture in the base of the inter-ventricular septum three-sixteenths of an inch in diameter.

At a meeting of the London Path. Soc., January 18, 1853, Dr. Hale presented a specimen taken from a child ten weeks old, in whom the pulmonary artery was unusually large, and the aorta of its ordinary size. The septum ventriculorum was almost entirely absent, and the foramen ovale open and of large size. In the Arch. Gén. de Méd., February, 1843, is the history of a foundling child, who died at the age of eleven days from umbilical phlebitis. The septum between the auricles and that between the ventricles, were both absent. A very similar case is related by Farre, but the child died at the age of seventy-nine hours. In all these cases the two sides of the heart were fully developed, the vessels were in their normal situations, and gave free passage to the blood.

The presence of apertures between the two sides of the heart, without cyanosis, does not prove that this disease may not occur in consequence of these apertures, for there might be some compensation which prevented its appearance. But when, as is really the truth, many instances may be adduced of communications between the auricles or ventricles, without cyanosis, and none have been mentioned of cyanosis occurring in connexion with this malformation, if also it was certain the two sides of the heart and their orifices were in their normal state, and there were nothing to disturb the regular action of the heart, it is safe to infer that openings in the septa of the heart are not sufficient to produce cyanosis. Still, facts show that in the common obstructive malformations, the blue disease is more apt to occur, or, if present, to be aggravated by the presence of these openings, for during the ventricular systole a larger quantity of blood would pass through the contracted orifice to be arterialized if it did not escape to the opposite side of the heart. If the openings are large, slight obstruction or irregularity of the heart's action, especially from inflammatory and febrile affections, is sufficient to produce the cyanotic hue. For example, in the Gazette des Hôpitaux, August 24, 1861, Gérard relates such a case, in which there were three inter-auricular apertures, but no lividity was observed till the heart's action was disturbed by an attack of bronchial inflammation. On the other hand cyanosis is not apt to occur, although there be much obstruction, if the septa are complete. It will be recollected that in the tables of cases only one such is given. This explains the fact that cyanosis rarely occurs unless the obstruction is congenital, for it is only in such cases that the two sides of the heart inter-communicate. In support of this view may be mentioned two cases reported by Dr. Elliotson in the London Med. Gaz., vol. x., and one by Dr. Peacock published in the Lond. Lanc., June, 1859—adults of the ages of twenty-three, thirty-nine, and sixty years. In all the pulmonary orifice was contracted, and it can scarcely be doubted that the blue disease would have been present had there been free communication between the pulmonary and systemic sides of the heart.

We now approach the question—What is the proximate pathological state which gives rise to cyanosis? Allusion has already been made to the two theories which prevail in the profession—the one attributing the disease to the intermingling of venous and arterial blood; the other to obstruction at the centre of circulation, and consequent venous congestion.

That the former theory is absurd, in other words, that admixture of the two kinds of blood is not essential to the production of cyanosis, is apparent from the following facts. In one case in the *Fourth Malformation*, there was no communication between the two sides of the heart, and the ductus arteriosus was closed, so that admixture was impossible. Again, in the *Eleventh Malformation*, or that in which the aorta and pulmonary artery are transposed, the blue disease evidently does not depend on the admixture of the two currents. On the other hand, in this curious state of the heart, the more the admixture the less the cyanosis, since the only way in which the systemic current of blood can be arterialized is by passing to the opposite side of the heart. An argument against this doctrine may also be found in the fact that the modes of compensation are not such as in any way diminish or obviate the admixture. It is admitted that in the more frequent malformations cyanosis is increased by the apertures, which allow the intermingling of the venous and arterial currents, but it is more reasonable to consider the intermingling and the cyanosis as the direct results of the malformation, neither having the precedence of the other, than to consider that they are related to each other as cause and effect, or as proximate and remote results. Viewed in this light, the admixture must be considered simply a concomitant of the cyanosis.

The second theory, that of venous congestion, has numbered among its advocates many who have given special attention to the subject, as Morgagni, Louis, and Stillé, but it seems to have even less claim for acceptance than the theory of admixture. It has been seen that in nearly all cases of cyanosis the two sides of the heart communicate freely, so that if the current of blood meets with an obstruction, as it commonly does, it readily escapes to the opposite side where the artery is large and gives it free passage. In this way congestion, if not prevented, is greatly diminished. Again, it will be seen that, although certain of the viscera are frequently found at the autopsy more or less congested, congestion is not uniformly present in the organs, as it would probably be were it the proximate cause of cyanosis.

Moreover, in some patients the malformation is not obstructive. The cavities and their orifices are of the normal size, and cyanosis is due entirely to malposition of the vessels. It cannot be said that in these cases there is venous congestion from arrest at the centre of circulation. If there be any congestion, it must be due to the fact that venous blood does not circulate as readily as arterial in the capillaries. It is true that in the paroxysms of dyspnœa there is sometimes more or less congestion; the distension of the jugulars shows this, but it subsides with the paroxysms, and is probably no more than usually occurs when the respiration is greatly embarrassed.

In fine, attempts to express the immediate pathological state producing cyanosis in the terms of a general law have failed. However plausible the above theories may appear in regard to certain cases, there are others to which they are manifestly inapplicable. Those who advocate these theories seem to lose sight of the obvious fact, that the chief want of the economy in cyanosis is arterialization of the blood, and it is hardly supposable that there can be any correct theory of its causation which is not founded on this fact. With this want of the economy in view it does not seem difficult to express a theory in comprehensive terms which is applicable to all cases, such as the following: *Cyanosis is due to vices or defects in the organism, usually congenital, which prevent the free and regular flow of blood to, through, or from the lungs.* So comprehensive a statement includes not only cases of malformation and malposition of the heart and its vessels, but also those few cases in which the lungs are in fault. In most patients, as we have seen, the current of blood *towards* the lungs is obstructed, and the current of blood *from* the lungs, in those comparatively rare cases in which the malformation is on the left side.

Physicians, in their post-mortem examinations of cyanotic patients, have usually directed their attention chiefly to the heart and the vessels in immediate connexion with it, so that their description of other viscera is commonly meagre. The pericardium, so far as can be ascertained from the records, ordinarily presented its normal appearance, excepting more or less distension from effusion within. The character and an approximate estimate of the quantity of effused fluid are mentioned in fifty-one cases. With rare exceptions it was pure serum. In seventeen the quantity was half an ounce or under, if we include in the number those in which the amount is expressed in such terms as "due quantity," "usual amount," and "small amount." In twenty-four cases the serum exceeded half an ounce; usually it was estimated at from one to six ounces, but in two it exceeded the latter quantity. In one of the twenty-four the serum was sanguinolent. In two cases the records state that there was a small quantity of blood in the pericardium, and in the remaining patient the two pericardial surfaces were agglutinated by fibrinous exudation.

In some of the autopsies serous effusion was found in the pleural cavities, usually in connexion with pericardial effusion, and in at least one instance the serum was tinged with blood. Old adhesions between the costal and pulmonary pleura were observed in a few instances. The condition of the lungs was recorded with more or less minuteness in 110 cases. Mention has already been made of the large number affected with tubercular disease, which, if not confined to the lungs, was chiefly exhibited in these organs. In thirty-five patients the records state that the lungs were of small size, either by compression, or sometimes, apparently, by the continuance of the fœtal state over a greater or less portion of the organ. The compression was produced either by the distended pericardium or by effusion in the pleural cavities. In thirty-five cases the lungs presented a dark color. This hue in some specimens accompanied the unexpanded or fœtal state of the organ, but in others there was no diminution of the size, and the dark color was due to engorgement or congestion. In other cases the lungs are said to have been natural, except the color. In nine there was emphysema in a part of the lungs, in two pneumonia; in two the color was pale, in one a bright crimson; in one the lungs were larger than natural, in one the right lung was absent, and in seventeen these organs were recorded healthy.

Next to the thoracic organs the viscus which would be most likely to be affected in cyanosis is the liver, since this is largely an eliminator of carbon. Mention is made of this organ in twenty-six cases, in sixteen of which it is recorded enlarged, and in four of the sixteen congested. Congestion is also recorded in eight other cases, in which no mention is made of the volume. The parenchyma had a natural appearance in nine cases, but in some of these there was enlargement. From these observations it is probable that the liver is commonly enlarged in cyanosis, and not unfrequently congested. In a few cases the condition of the other abdominal viscera is mentioned; in some as healthy, in others as congested. There were fifteen examinations of the brain, in seven of which congestion is recorded, and in three abscesses in the cerebral substance, in one of which cases the lateral ventricle was also filled with pus; in two there was softening of a portion of the brain, in three the brain was firm or compact, in three the quantity of serum in the cranial cavity exceeded the normal amount, and in one it seems to have been less.

The character of the blood in cyanosis is a subject of much interest, but about which little is known, except that its color is dark, its coagulability feeble, and, probably from the nature of the disease, carbonaceous products are in excess, while oxygen is in less than the normal quantity. No chemical analysis of the blood in cyanosis has yet been published, so far as I can find. There is reason to believe that the hydro-carbons as well as carbonic acid are in excess in cyanotic blood. That carbonic acid is in excess is probable, from the fact that it is one of the chief functions of the lungs to eliminate it. That the hydro-carbons are in excess is probable for the following reason:—The only viscus besides the lungs which can eliminate carbon from the system in any considerable quantity is the liver, and, in the words of Dr. Carpenter, "the composition of the secretion ('bile') clearly indicates that it is intended to eliminate from the blood its superfluous hydro-carbon." Now, that this organ does really perform the vicarious function in cyanosis is probable from its usually augmented size. And as the liver cannot rid the system of carbon except in the form of hydro-carbon, and as the hydro-carbons, as cholesterine, are not formed in the liver but are separated as such from the blood, the inference is reasonable that cyanotic blood contains the hydro-carbons in excess. This idea also derives support from the fact that but little oxygen is required for the formation of these substances. But this is a question which can only be decided by chemical analysis.

From the nature of cyanosis it is evident the treatment should be more hygienic than medicinal. The patient should be warmly clad and kept in a warm room, and all agencies calculated to embarrass or disturb the functions of the body or excite the emotions should be studiously avoided. The diet should be simple but nutritious.

Much has been said of position as a means of alleviating the severity of the disease. It will be recollected that Prof. Meigs of Philadelphia made the remarkable statement, some years since, that he had seen the blue color disappear the very instant the child was placed on the right side, with the head and limbs somewhat raised, and that, by this means, he had saved fifty or sixty children in a hundred. These remarks were evidently made in the belief that cyanosis depends entirely on the apertures between the two sides of the heart, and the consequent admixture of the venous and arterial blood. Faith in a theory must have influenced his observation of facts. It is very evident from the character of the malformations that little real benefit can be expected from placing the patient in any one position. In case No. 7, "the only easy and indeed comfortable position in which the child could remain was that usual in nursing. When erect, the dusky color of the face and neck became a dark blue." In Nos. 14

and 64, position on the right side made no difference with the symptoms. In No. 36 the patient was easiest on the hands and knees; in No. 56, with the head elevated; in No. 68 the paroxysm could be avoided by lying on the left side for ten minutes; in No. 24 the patient suffered most when erect; in Nos. 103 and 156 the patients did not feel well except when lying on the right side; in Nos. 99 and 117 the patients lay indifferently on either side; on the other hand, in Nos. 178 and 191 the recumbent position was badly tolerated. From these observations it appears that some obtain most relief by lying on the back, others on the right side, others on the left, some when on the hands and knees, some when reclining on either side indifferently, while, finally, others suffer least when erect.

There was a time when the paroxysms were treated by venesection, but depletion has long since been abandoned. Physicians now rely on stimulants, antispasmodics, friction to the chest, and mustard pediluvia to relieve the urgent symptoms, although this treatment is but partially successful.

Original Communications.

OPERATION FOR THE REMOVAL OF A SINGLE GOITROUS TUMOR OF THE NECK.

By T. S. SMITH, M.D.,
OF LEXINGTON, MISSOURI.

On the 30th of June, Dr. Ruffin, of this city, brought to my office Q. H., a mulatto man, aged 34 years, by occupation a barber, with what he supposed to be an encysted tumor of the left side of the neck. It rested upon the clavicle below, extending to the border of the trapezius muscle on the outside; in front, it rested against the trachea; above, it reached nearly to the inferior maxilla. The patient first noticed it about four years ago; but its growth was slow, until about four or five months ago, since which time it had been growing fast, and had interfered with his breathing when he turned his head to the right. When asleep, if his head turned to the right, he awoke with a sense of suffocation, swimming in the head, amounting almost to vertigo, and was only relieved by sitting up in bed, and getting his wife to fan him rapidly in the face for some minutes.

He was anxious about it, and desirous to have it removed at once, and as his health was good, and the weather fine, the next day, July 1st, at 10 o'clock A.M., was set for the operation. Assisted by Drs. Ruffin, Young, Vaughn, and Wilmot, I commenced the operation by making an incision from the sterno-clavicular junction to the angle of the inferior maxillæ, cutting through the skin, superficial fascia, and platysma myoides muscle. As the tumor was freely movable in every direction, I expected to have reached it at this cut, but finding that I had not reached it, I dissected up the sterno-mastoid muscle, and pushed it as far outwards as I could. The incision was then carefully deepened, until we saw the omo-hyoid muscle lying across the track of the cut. Knowing that it would not do to cut the muscle in two, and finding that we could proceed no further without room, we determined to make another incision, beginning at the middle of the first, and extending across the trachea three inches long.

The flaps made by this incision were turned back, and several large vessels secured by the ligature. This revealed to us the tumor lying under the sterno-hyoid, sterno-thyroid, and omo-hyoid muscles. These muscles were all loosened up with the handle of the knife, and pushed aside, and revealed to us a tumor as large as the fist of a man, covered by a tough membrane, probably adventitious. This was carefully divided across the whole extent of the tumor, and separated from the loose cellular connexion by passing the finger freely all around the tumor.

The tumor was now loose, except at its base, and a strong thick band as broad as the three fingers running across the trachea, and firmly connected to something on the right side. We now had to tie several small and one large artery, and stop the capillary bleeding with ice-water. The tumor was now fully exposed, and we had a fair chance to examine it thoroughly. We had for some time suspected its character, but holding to the generally received opinion that there is no such thing as a single goitre, we were determined to demonstrate beyond a doubt what its true character was.

At its base it was loosely attached to the structures below, but a careful examination by all of us proved it to be firmly attached to the perfectly healthy right lobe of the thyroid gland, by a band as wide as three fingers, and very firm, and at least three-quarters of an inch thick; and in it many large arteries could be felt freely pulsating. It was firmly attached to the carotid sheath, and the superior and inferior thyroid arteries could be seen dipping into its substance. I passed a needle, armed with a strong silk ligature, under the inferior thyroid artery, and tied it; but this wounded the surface of the tumor very slightly, and gave rise to severe bleeding, which neither ice nor the solution of the perchloride of iron would arrest, and we had to grasp it with the forceps, and tie it. It was impossible to get a ligature around the superior thyroid artery without wounding the surface of the tumor, as the artery was imbedded in it, and to have tied it close to the parent vessel would have been to insure a chance for secondary hæmorrhage of a serious character.

There was another vessel which came from the subclavian artery, and was as large as a large-sized goose-quill; this dipped into the tumor on the under side, passed through it, and again showed itself running along the superior border of the tumor for a short distance, then dipped into it again. This artery we supposed to be the transverse colli, or a branch of it very much enlarged. We were very careful to satisfy ourselves that this was not an aneurism, for no pulsation could be felt in it, only at such points where large vessels were passing through it; its outer covering was a very thin transparent membrane, having much the appearance of a serous sac; and the best description that I can give of its appearance is that of a thin sac of bright-pink color, with a broad neck, filled with a number of deep red earth-worms, some at rest, others enlarging and contracting in strict harmony with the heart's movements. To have tied the vessels leading to it, and then have dissected it loose from the sheath of the carotid, and lastly, to have divided its connexion with the right half of the gland, would have left us a large number of arteries coming from the remaining half of the gland, which would have produced fatal hæmorrhage, as they would in all probability have retracted into the gland, and could not have been secured. To have secured the arteries of the right, and have removed both lobes of the body, was hazardous in the extreme.

Considering, finally, all the points bearing on the case, we came to the conclusion that we had better let it remain, that by so doing we were giving him the best chance for life. I pressed the tumor as far as I could from the trachea, replaced all of the muscles, and brought the skin together with ten silver wire sutures and some isinglass-plaster. A wet compress, and roller loosely applied, completed the dressing. We tied fourteen arteries. The operation lasted two and a half hours, most of which time was taken up in examining and consulting. He was under the full influence of chloroform all the while, and took twelve ounces without the slightest untoward symptom. On the 5th day, we removed the dressing, and found the whole of the cut united by the first intention, except when the ligatures came out. At this time, twenty-three days after the operation, he is well, and at his work, and the tumor is reduced one half by internal and external use of iodine.

I believe the existence of single goitre is ignored by all the writers on surgery or pathology that I have seen; but this case has been demonstrated by the knife on the living subject, as clearly as it could have been on a dead subject: and this man tells me that his mother died of a similar tumor on her neck; had he told me this before I cut him I should not have done so. I am fully convinced of the frequent existence of single goitre in this country—at least, I do not remember to have seen it in any other part of the United States. I know at least a dozen cases in this place, which has a population of from 5000 to 6000. I know one family here, in which four sisters, mulattoes, have a large single goitre. In the white man or woman I have seen only two or three single goitre, and they were either scrofulous or syphilitic subjects.

LEXINGTON, MO.

COMMENTS UPON THE CASE.

By Prof. Valentine Mott, M.D., LL.D.

[To the Editor of the American Medical Times.]

SIR:—I received the inclosed paper some days since from DR. SMITH, of Lexington, Missouri, and forward it to you for publication.

It details a formidable and difficult operation, with an interesting and gratifying result.

It establishes the fact, that one lobe of the thyroid body may be goitrous without the whole body being involved.

I was ignorant of this fact myself, and have taught for over fifty years a different opinion.

Dr. Smith's case is conclusive, as far as a case can go, of the goitrous state of one lobe of the thyroid. And his statement of cases about him is fully confirmatory of the fact.

My observation and experience in this country extend over a long period, and I am certain that I have never seen one side only of this body affected.

My opportunity some years since in Switzerland was extensive, particularly in the Valais country, where at every turn we see goitre. In no instance did I see it on one side.

This fact I published on my return home. An eminent physician in Geneva confirmed me in this opinion.

I have seen and operated upon tumors of the neck which have so much simulated an enlargement of one lobe of the thyroid body, and lying too under the sterno-hyoid and sterno-thyroid muscles, that not until the operation was about finished, did I know the truth; the whole structure of that side being fretted away by the pressure of the tumor, so that nothing but its collapsed tunics remained.

One which I lately removed, nearly the size of my two fists, was of this description.

Yours truly,

V. MOTT.

NEW YORK, Sept 25, 1863.
1 Gramercy Park.

ON THE TREATMENT OF
GUNSHOT FRACTURES OF FEMUR AND TIBIA.

By JOHN T. HODGEN, M.D.,

SURGEON U.S. ARMY.

I DESIRE once more to tax the patience of your readers on the subject of gunshot fractures of the femur and tibia, and the appliances for their treatment.

Amputation in these cases has been pretty generally abandoned by our army surgeons, except when joints, blood-vessels, or nerves, are implicated. To this practice of preserving limbs, they have been guided by the facts accumulated during the present war. But the best mode of treatment, and the amount of interference on the part of the surgeon, seems not to be so fully determined.

When a ball strikes a long bone, there is more or less shattering, and a greater or less number of fragments are detached from all connexion; others, though separated from bony parts, still adhere by periosteum.

Now, there is no question but that the duty of the surgeon, immediately after such injury, is to remove all the completely separated fragments; but as to those still holding their periosteal relations (since the periosteum is the framework by which the blood-vessels reach the bone, and the presumption being that the vessels are still in condition to transmit blood to the bone for its nourishment), each fragment, however small, serves as a nucleus from which the material destined to unite the bone is effused. It therefore becomes desirable to save all such fragments, instead of resecting in continuity, as has been practised by many of our surgeons, as I think to the disadvantage of the patient.

I would say, then, that resection in continuity is never profitable; and that it diminishes the chances of recovery with a useful limb, as it removes a part of the material, which, if left, would aid in the union.

Meddlesome interference often diminishes the chances of recovery. In compound comminuted fractures, it is a common practice to use the probe freely every few days, with the view of detecting detached fragments that may be a source of irritation. The surgeon is impatient for the removal of dead and yet fixed portions of the bone; and, finding a pair of forceps in his case of instruments, he is tempted to use them in cutting off the offending part, and thus causes an inflammatory action that results in the death and final separation of a much larger portion than would have otherwise been lost, to say nothing of the suffering and prostration of the patient necessarily following such interference. It must be remembered that several weeks are required by Nature, in her efforts at removing foreign matters, to cut loose a piece of dead bone, so that the surgeon's forceps may remove it.

Again, limbs are too frequently moved for the purpose of cleansing them; not that I object to having them kept clean, but the disturbance which is necessary, in consequence of the imperfect appliances used in supporting the limb, is sure to retard, if it does not altogether prevent union.

I would say in these cases of compound comminuted fractures of the femur and tibia, remove all fragments that are entirely free; when this is done, make no further explorations in search of dead or detached fragments for six weeks, or two months. Place the limb in the position in which it is destined to remain during treatment, and so arrange the apparatus that it will not be necessary to remove it in keeping the wound free from irritatory discharges.

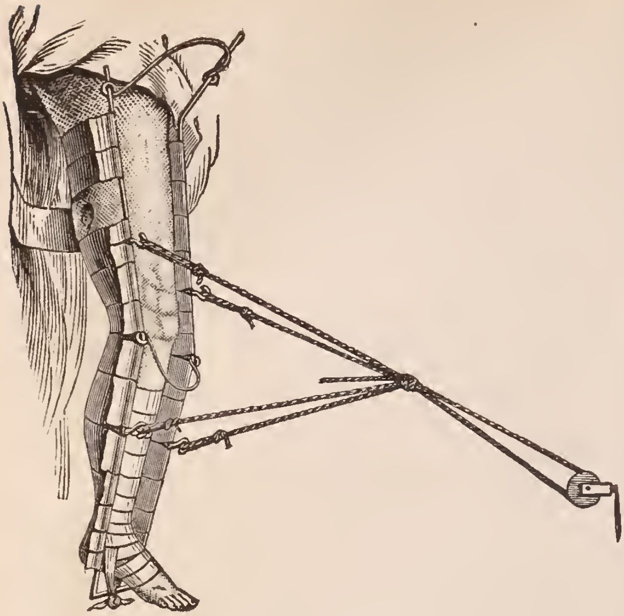
In the AMERICAN MEDICAL TIMES, of the 21st of May, of the present year, I gave a cut, and description of a cradle-splint (as I call it), which has been used with advantage. Since that time I have used a more simple apparatus, and found it to answer all the ends served by the first, and in some respects to be more desirable.

The splint referred to is a combination of the principles of Smith's anterior splint, Swinburn's extension, and the strip bandage supports used in my cradle-splints. The cut gives a clear idea of it as applied.

The body of the splint is made of No. 2 iron wire, which is sufficiently strong to support the limb, all of one piece, bent as seen in the cut.

The dimensions are as follows:—Four inches across the bottom of the foot: twenty-two inches from the foot to bend at the knee; twenty inches from the bend of the knee to the upper ends of the wire (corresponding to the pubes and hip when applied). These upper ends are eight or nine inches apart, being separated by a bow of thick wire; another similar bow is placed at the knee, having a span of six inches.

These two bows are made so that they can be put on or taken off without disturbing the dressings, and are put in position after all else is arranged—the one at the hip having a loop at each end to receive the upper ends of the splint wires, the other simply hooks, to be looped on at the knee.



How Applied.—A bandage is applied to the foot; adhesive straps, three inches wide, are applied each side of the leg, extending four or five inches below the foot, and up to the knee in case of fracture of the femur; to the fracture, in case the tibia is the injured part. The roller is then extended smoothly over the adhesive plasters.

That limb of the splint designed to pass next the pubes is bent upwards, at a point from the bend of the knee in the splint corresponding to the distance from the bend of the knee to the pubes on the sound side of the body.

Strips of bandage three inches wide are now looped over one limb of the splint, continuously from the upper to the lower end, and allowed to belly downwards a distance equal to two-thirds of the diameter of that part of the extremity designed to rest upon each one; the other ends of these strips are pinned over the other limb of the splint, thus forming a double inclined trough in which the extremity is now to be placed. The free ends of the adhesive strips are next fastened to the cross-piece at the foot, three inches apart, and the whole suspended from a pulley fixed to the ceiling, or a frame; the pulley should be almost directly over the foot, giving the suspending cord an oblique direction, that in this way we may have sufficient extension.

If the patient is disposed to slide towards the foot of the bed, this must be elevated on two bricks under each of the legs at the foot of the bedstead.

The advantages claimed for this arrangement, are:—

1st. That the limb is entirely free from compressing bandages, so that circulation and nutrition are uninterrupted; consequently repair goes on in its wonted course.

2d. The limb may at any time be examined without disturbing the dressings.

3d. Any one of the supporting strips may be removed and replaced without displacing the fracture; consequently the external wound may be frequently dressed, and all offensive matter removed as often as may be required.

4th. The absence of the perineal band, and the limb being suspended on strips of muslin, there can be no perineal excoriations, no ulceration of the heel, while every part of the limb is kept cool in the hottest weather.

5th. The freedom with which the limb moves in obedience to impulses received from the hip and upper part of the thigh, allows the patient to sit up, to move to any part of the bed, or lift himself on a bed-pan, without disturbing the fracture or causing the patient the least pain.

All of these requisites are not answered by any other splint in general use. Dr. Smith's anterior splint embraces all the qualities required for simple fractures; but it is not, in my opinion, so well adapted to compound fractures, as it does not admit of the limb being so easily inspected, or offer the same facilities for dressing.

St. Louis, Mo., Sept. 11th, 1863.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, September 16, 1863.

DR. JAMES ANDERSON, PRESIDENT, IN THE CHAIR.

A REPORT ON THE PROPERTIES AND COMPOSITION OF THE RIDGEWOOD DISINFECTING POWDER.

A report was received from the Section on Public Health and Legal Medicine, through its Chairman, Dr. Griscom, on the *Ridgewood Disinfecting Powder*, which had been presented to the Academy a few months previously, and referred to that Section for examination and report.

After some general remarks on the superior value of solid and fluid disinfectants over those of a gaseous form, chlorine and nitrous acid, etc., as going directly to the source of the evil, and preventing its formation or escape, instead of attempting to control the noxious matters after their dissemination, as gaseous correctives can only do, the report gives the details of several experiments which were made to test its alleged deodorizing and disinfecting properties.

The first test to which it was subjected was on the contents of a vessel in which a number of small bones had been macerating in water several weeks, giving forth an intolerably offensive odor; a handful or two of the powder being thrown in the vessel, in five minutes the offensiveness was entirely corrected, and when examined three months afterwards (at the close of the intensely hot summer), the good effects remained as manifest as at the first. The bones were found entirely denuded, in perfect preservation, and they as well as the water odorless.

The second experiment was a comparative one. The carcases of two dogs which died on the same day, were placed one on the ground, exposed to the influence of air and sun; the other, enveloped in a bed of the powder, about two or three inches thick. On the fifth day, the temperature all the time being considerably over 100°, the first carcase was found completely decomposed and yielding a most fœtid effluvium. This effluvium was immediately arrested by throwing upon the remains a pound or two of the powder. Upon removing the other body from its bed, it was found in an almost perfect state of preservation, the only manifestation of decay being some swelling of the trunk from the internal generation of gases. The inference from this experiment was, that the ridgewood powder acted as an *antiseptec*, as well as a deodorizer. About four weeks afterwards, the great heat of the weather having continued in the meantime, the second carcase (having been replaced in its powdery bed) was found to have undergone some decay, evinced by a partial denudation of the skin of its hair, and some apparent softening of the flesh. It was however, considering the state of the weather, and the length of time, in a remarkable state of preservation.

A third experiment was made by eviscerating a small animal, and sprinkling the cavities with the powder, as well as covering the body externally with it. This was to avoid the generation of intestinal gases. The result was that after four weeks, the body being again exposed, the flesh was found dry, well preserved, and inodorous, the process of decomposition, to all appearance, having been suspended.

From these results it would seem that this article would prove a valuable assistant to the undertaker, in the preservation of bodies, especially after post-mortem examinations.

Other experiments were reported by the Committee, all going to prove its power of deodorizing decaying matters, and preventing decomposition.

In addition to the experience thus obtained by the section, other evidence was collected from the reports of several military hospitals in Washington and elsewhere, where the new disinfectant had been tried. This testimony was strongly corroborated. The ability of the Ridgewood powder to control the ammoniacal odor of stale urine, to correct the smell from water-closets, to remove the offensiveness of the post-mortem room, when sprinkled on the floor, etc., and to check the decomposition of the dead bodies, even after its commencement, were strongly testified to by several surgeons-in-charge, among whom we recognised several well known names, as Drs. Paul B. Goddard, Antisell, U. H. Butler, Judson, and others which we do not recollected.

Dr. Butler, of the Armory Square Hospital, states in his report to Medical Director Abbott, "the superintendent (of the dead house) reports that on sprinkling a moderate quantity on badly decomposed bodies, the offensive effluvia disappeared, and he gives it as his opinion that it is the best disinfecting agent we have used."

The composition of this powder, as given in the report to the Academy of Medicine, is as follows:—Carbolic acid, five to eight per cent.; sesquichlor. ferri, two to five per cent.; charcoal or pulverized pumice, five per cent.; lime, from magnesian limestone, five per cent.; Fuller's earth, seventy to eighty per cent.; and a trace of the sulphates of potash and soda.

From the facts above reported, and an examination of these components, it is manifest that this powder is a valuable addition to the list of deodorizers and disinfectants, and that while others, as the nitrate of lead, chloride of zinc, and permanganate of potass, are equally efficacious, and perhaps better adapted to some necessities, especially about the persons of the sick in hospital wards, etc., the greater cheapness of the Ridgewood powder must commend it in all other localities, and for general use.

The report to the Academy concluded with a recommendation of its use in stables, especially in cities, as a means of preventing the unpleasant odors from the animal fæces and urine, and as a means of retaining in the manures, the gases whose escape impairs value for agricultural purposes, at the same time that they infect the air.

Its general use in the filthy courts, cellars, privies, and even in the streets and gutters of the city (instead of the lime which we sometimes see so freely and uselessly distributed), would doubtless have a happy effect in purifying those nauseous localities; and the same may be said of many of the camps and fortifications of the army, especially of those cities which have recently been captured from the rebels, and as is always the case after long military occupation and siege, are in shockingly unsanitary condition.

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Surgical Instruments constructed of Aluminium Bronze.—M. Morel-Lavallée has recently made a very favorable report to the Paris Society of Surgery upon a pocket-case of instruments fabricated by MM. Robert and Collin of aluminium bronze, consisting of ninety-five parts of copper and five of aluminium. All the instruments except the blades are made of this material, and they may advantageously replace silver in many cases, and in others iron or even steel. The alloy is not oxidizable, and preserves its brightness amidst the various agents it is brought in contact with in daily practice.—*Lancet.*

Enlargement of the Heart in Chlorosis.—Dr. Strak believes that sufficient attention has not been paid to this complication. He adduces four cases in which enlargement of the heart was observed during the progress of the chlorosis, diminishing again as the original disease underwent amendment.—*Archiv. der Heilkunde*, 1863, No. 1.

American Medical Times.

SATURDAY, OCTOBER 10, 1863.

SICKNESS AND DEATH-RATES IN THE ARMY.

How much life and vital force does the great War for the Republic necessarily and inevitably require, and how much does it needlessly waste, are questions that not only concern every citizen and every home in the land, but profoundly concern the State and the great interests of civilization and humanity.

In Circular No. 15, from the Surgeon-General's Office, which has just reached our table, we discover how these vital questions are being studied in the Medical Bureau, and how wrought out in practical labors by medical and commanding officers in the field. And we are free to say that the manner and the results of such working, both at the Bureau and among the tented myriads where the nation's life struggle is progressing, do far better defence of the Medical Staff, and more emphatically pronounce its deserved encomium, than aught we can write. Not to sympathize in such labors, and not to aid and sustain the men upon whom devolve the life-conserving duties in this great war, is unworthy men claiming membership in our profession, or citizenship in the Republic. And with augmented emphasis would we apply this remark to any military surgeon who may, in heart or even practically, by his negligence of official and defined duties, be charged with such indifference.

It is a fact well known to the profession that, in the earlier period of the war, it was regarded as doubtful whether the suddenly gathered medical staff of the volunteer army could or would be brought into the habit and duty of faithfully reporting statistics, and practically enforcing systematic sanitary regulations, and exact hygienic observations. We have reason to believe that it was the painful recollection of such failures in the official duties of volunteer surgeons in the Mexican War, no less than his humane purposes, that led that veteran surgeon, Dr. Robert C. Wood, the acting Chief of the Bureau, at the very opening of the war, not only to request the War Department to sanction the organization of the United States Sanitary Commission, but actually to accept an appointment in that Commission, and become one of its effective workers.

These remarks are justified by the history and progress of sanitary inquiry and sanitary works in the army medical department; and if our readers will examine the following figures and quotations from the circular before mentioned, they will obtain some idea how the work of sanitary inquiry and improvements was conducted during the first year of the war, and how the study of military hygiene and the vital statistics in our vast armies are now systematized and progressing in the medical bureau.

Dr. J. J. Woodward, who is in charge of the preparation of the medical history of the armies in the field, reports under date of September 2d, that

"In accordance with instructions from the Surgeon-General, directing me to prepare a brief statement of some of the more important facts with regard to the influence of season and region on the camp diseases of the army, as exemplified by the statistics of the first year of the rebellion, I have the honor to submit for your consideration the accompanying tables and diagrams, with a few brief remarks.

"The compilation of the medical statistics of the year ending June 30, 1862, has now been completed for some time, and the manuscript of the first volume of the medical history of the war, of which these statistics form a part, will, it is believed, be ready in time to be laid before Congress at its approaching session.

"Elaborate statistical tables, with accompanying diagrams, have been compiled separately for each of the great armies in the field, all of which have important bearings upon the subject now under consideration. To present these tables would, however, require a volume of some size, and is therefore out of the question at present; I therefore merely offer certain general facts with regard to a few poiuts of interest, such as the mortality rates, the general sickness rates, and the prevalence of a few of the most important diseases during the first year of the war."

The reporter proceeds to state, that "the general mortality rate of the armies of the United States during the first year of the rebellion was 67.6 per thousand of mean strength, including with deaths from disease those from wounds and injuries. The mortality from disease alone was 50·4 per thousand, that from wounds and injuries of every kind 17·2 per thousand."

A summary of the mortality statistics is presented in the following table:—

Monthly mortality rates of the armies of the United States during the year ending June 30, 1682, expressed in ratio per thousand of mean strength.

	1861.						1862.						
	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	For the year.
Atlantic border.	2.00	2 06	1.79	2 04	2.68	3.24	2.93	2.43	2.58	3.16	3.27	3.53	33.40
Central region.	1.02	2.73	3.49	4.66	6.36	6.61	8.68	9.27	10.66	6.67	7.40	6.15	82.19
Pacific border	1.45	1.48	1.18	1.54	1.43	0.91	0 21	0.44	1.03	0.36	0.00	0.44	10.76

Respecting the general prevalence of disease, Dr. Woodward states that:—

"The difference between the three regions above contrasted is not so conspicuous in the general sickness rates as in the mortality, yet the whole number taken sick in the central region was greater than on the Atlantic coast, and in this again greater than on the Pacific. In the first, the number taken on sick report during the year was 3368.14 per thousand of mean strength; in the second, 2748.83, and in the third, 2586.60. It will thus be seen that in each of these regions a large proportion of the troops must have been taken sick several times during the year."[*]

"Under the head of camp fever, all the cases reported to the Surgeon-General's office as typhus, typhoid, common continued, and remittent fevers, are here included. Of these several categories it may well be doubted how far the cases reported as typhus were really of that character. From the details furnished by sanitary reports it appears probable that, with perhaps rare exceptions, what was regarded as typhus was, in fact, of a very different nature, severe typhoid fever, with cerebral complications, and congestive intermittents in scorbutic constitutions being shown, in some cases at least, to have been regarded as typhus. This error was not, however, very widely diffused, the whole number of cases reported as typhus amounting to but a few hundred. As for the cases reported as common continued fever, the vast majority appear to have been different only in degree of severity from those reported as typhoid or remittent. Moreover, while a certain amount of uncomplicated enteric and remittent fever certainly did occur, especially at the commencement of the war, the vast majority of the camp fevers of the army were of a mixed character, exhibiting undoubted enteric phenomena, variously combined with the periodicity and other peculiarities of malarial disease, and still further modified by the tendency to incipient scurvy, which is the ordinary concomitant of camp diet. To indicate this mixed nature, the term typho-malarial fever, which I had the honor to suggest to the department in June, 1862, appears appropriate, and, at the present time, is coming into very general use.

"A correct understanding of the nature of these fevers is of the utmost importancs, as they play a conspicuous part in the mortality of our armies. During the year under consideration 44.5 per cent. of all the deaths from disease were due to camp fevers.

"An examination of Table III shows that the frequency and mortality of camp fever differs considerably in the three regions. On the Atlantic border the annual ratio of cases was 238.99 per thousand of mean strength, and the ratio of deaths to cases was 71.9 per thousand, or one death to every 13.9 cases. In the central region the annual ratio of cases was 319.94 per thousand, and the ratio of deaths 101.8 per thousand cases, or one in 9.8. On the Pacific coast the annual ratio of cases was only 60.95 per thousand, and the ratio of deaths to cases 45.2, or one in 22.1. The severity of camp fever in these several regions is thus shown to differ as considerably as their frequency."

"Diarrhœa and dysentery caused about one-fourth of all the sickness reported. On the Atlantic border more than half the army suffered, and in the central region the number of cases almost equalled the mean strength. Although not nearly so fatal as camp fever, affections of this class were an important cause of the mortality of our army. In the chronic cases, though most generally called diarrhœa, and not dysentery, the colon was the seat of the chief lesion. The most characteristic post-mortem appearance was a thickened, softened condition of the mucous membrane, with pigment deposit and enlargement of the solitary follicles, frequently terminating in ulceration, the ulcers being sometimes punctiform, sometimes extensive, and irregular. In this condition the small intestine fre-

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[*] "*Monthly sickness rates of the armies of the United States during the year ending June* 30, 1862, *expressed in ratio per thousand of mean strength.*

	1861.						1862.						
	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	For the year.
Atlantic border..	391 35	372.18	298.26	267.14	255.90	230.99	199 92	183.33	167.25	214.52	208.45	239.75	2748.83
Central region..	258.65	356.91	325.40	326 11	300.24	305.71	323.55	249 85	252 61	284.32	259.70	232.83	3368.14
Pacific border...	198 91	200.37	245.27	210.19	279.89	198 84	201.13	258.27	236.67	136.08	157.47	193.51	2586.60

quently participated, more or less, but often produced nothing abnormal."

"Great efforts have been made during the fiscal year ending June 30, 1863, to secure completeness in the medical statistics; and these efforts, although not crowned with perfect success, have had the effect of rendering the reports for that year comparatively complete, and the work of compiling them is progressing as rapidly as is possible with the clerical force employed.

"It is believed that, as the attention of the medical officers in service is now fully directed to the effort being made to compile these statistics, their hearty co-operation may be relied upon, and that the figures for the present year may be hoped to be as nearly complete as can be expected from any great army in time of war."

Monthly rates of camp fever in the armies of the United States during the year ending June 30, 1862, expressed in ratio per thousand of mean strength.

	1861.						1863.						
	July.	Auguss.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	For the year.
Atlantic border..	8.80	18.73	25.60	27.64	27.88	19.74	13.85	13.81	10.99	17.42	24.88	27.07	238.99
Central region ..	15.94	34.07	88.06	86.57	85.38	26.00	21.98	18.15	16.46	23.71	29.89	27.64	819.49
Pacific border...	1.45	6.23	1.97	9.73	5.31	7.48	8.78	5.00	5.15	2.28	5.52	1.78	60.95

Monthly rates of diarrhœa and dysentery in the armies of the United States during the year ending June 30, 1862, expressed in ratio per thousand of mean strength.

	1861.						1862.						
	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	For the year.
Atlantic border..	168.23	116.29	70.80	62.66	46.00	28.54	28.20	22.20	35.22	67.20	70.92	87.06	646.01
Central region..	88.93	127.72	93.84	92.50	69.63	61.27	68.00	64.13	68.66	105.82	97.07	83.02	994.77
Pacific coast....	29.41	40.67	33.12	82.00	85.92	20.12	18.07	20.02	23.87	18.97	29.09	30.25	819.64

The statements we have here quoted cannot fail to interest every member of the profession, for they plainly foreshadow the accomplishment of most desirable ends in the conservation of life and military effectiveness in the national forces. As civilians, we confess our sense of obligation and hearty sympathy in the great work of sanitary inquiry that is silently going forward in the medical bureau and in the field, and we would earnestly conjure the surgeons of regiments and directors of corps to give the greatest practicable completeness and value to their stated inquiries and reports. It is by means of more comprehensive and complete statistical records and sanitary works that military surgeons are to command a more liberal treatment from the government; and this, certainly, is the least of the reasons for such faithfulness in duty.

THE WEEK.

The British *Medical Journal* raises the following pertinent inquiry relating to vivisections :—

"A noble lord, and, if we are not mistaken, a keeper of foxhounds (which sporting position may he long maintain!), is at the head of the Royal Society for Protection of Animals; and many honorable sporting gentlemen also support it. Now, the object of the Society is, as we understand it, to put down, as far as it may, all unnecessary pain which may be inflicted on animals; and, under this head, vivisections are denounced. Are these gentlemen, then, and this noble lord, ready, on the principles which they advocate, to put down their guns and their foxhounds? They are bound to do so on their own principles, if consistent. We have no hesitation in asserting that more pain (and manifestly unnecessary pain) and suffering is produced in animals by the gun of the sportsman on the 12th of August, the 1st of September, and the 1st of October, than is occasioned in any twenty years of vivisections, as practised in this country. The fact is obvious, and readily comprehensible to any one who will give the facts of the case due consideration. Out of every hundred animals shot at, a certain percentage get away *wounded.* What is meant by the term *wounded?* Why, simply this: that the animal has been vivisected by the shot which struck it; and that, according to the nature of the part so cut up, will the pain of the animal be great or small, of short or long duration. A hare goes off with a broken leg, the two sharp ends of the bone sticking through the skin; and he may live for days in this state, and even recover from it. What vivisecting process of the physiologist can be compared with the pain inflicted on this animal by the shot of the sportsman?" * * * The physiologist has this to say, which gives him an infinite superiority over the sportsman: he experiments with the object of relieving human suffering, and he operates whilst the animal is under chloroform. The sportsman has no other object than amusement in the business."

The Sanitary Commission is holding a general meeting at Washington. This meeting will be important, as it is the first held since the retirement of Mr. Olmstead, the General Secretary. The business of the Commission is enormous, extending to every branch of the army, and yet its energies do not flag.

In a recent report of Mr. Simon, Medical Officer to the English Privy Council, reference is made to the effect upon the human subject of meat infected with parasites, and the possible ill effects of consuming the flesh of animals affected with anthracite or anthracoid disease, such as the braxy of sheep, the black-quarter of horned cattle and sheep, tongue carbuncle, hog-cholera, parturition-fever of cows, or with infectious fevers. He is "of opinion that the absence of evidence is enough to show that immediate ill effects of any considerable importance do not ordinarily follow the consumption of meat" from animals which have been affected with pleuro-pneumonia and aphtha. In regard to the opinion that boils are caused by the consumption of diseased meat, he says: "Though I have not yet found any fact which I can deem conclusive in support of this opinion, I must admit that the alleged connexion is not *primâ facie* impossible."

Reviews.

A Treatise on Hygiene, with Especial Reference to the Military Service. By William A. Hammond, M.D., Surgeon-General U. S. Army; Fellow of the College of Physicians of Philadelphia; Member of the Philadelphia Pathological Society; of the Academy of Natural Sciences; of the American Philosophical Society; Honorary Corresponding Member of the British Medical Association, etc., etc. Philadelphia: J. B. Lippincott & Co. 1863. 8vo. pp. 604.

(*Concluded from page* 164.)

Dr. Hammond's observations upon the hygienic questions connected with the peculiarities of soils, locality, and climate, are worthy the attention of every military officer. Quoting M. Schübler's instructive tables, showing the hygroscopic properties of different soils, Dr. Hammond goes on to say, "that the argillaceous soils and those composed of humus are pre-eminently distinguished for their ability to absorb moisture. On this account ground which is in great part composed of these substances does not answer well for camping purposes. Perhaps the worst of all kinds of soil for camp is that in which sand and humus form the upper stratum, the lower or subsoil being formed of clay. . . . . Many camps have been rendered unhealthy solely, so far as could be perceived, through the bad character of the soil in respect to its power of absorbing and retaining moisture."

Respecting the capacity of different soils for retaining caloric, the author quotes his own experience in *bivouacking* as corroborating the definite experiments of Schübler, who has shown that calcareous sand, pure clay, and humus, stand related in this respect, as 100, 66, and 49. And as respects the important quality of soils in their capacity for absorbing organic exhalations or effluvia, and again yielding them under the oxidizing test of the alkaline permanganates, the author has, from his own neat experiments, derived the following results. The effluvia from a jar containing putrid meat, vegetables, and urine, being made to permeate a given quantity (250 grains) of each specimen of soil, and a measured current of fresh air being passed through the same soils, both previously and subsequently to that process of infusion with the effluvia, these numbers showed the cubic inches of air required as passed through to decolorize a standard solution of permanganate of potassa. The column A shows the result previous to the permeation of the soils by the effluvia; while the column B shows the subsequent result.

Kind of Soil.	A.	B.
Pure Sand	73.5	67.5
Dry Clay	59.	49.5
Sand, Clay, and Marl	64.5	58.
Humus	41.	11.5

Considered practically, with reference to the deodorizing and disinfecting power of dry earths and the different soils, these are interesting results; and as respects the relative value of sand and humus, these numbers probably give the true indications; but as respects albuminous soils there must be taken into consideration the remarkable avidity with which clay and other porous silicates of alumina and lime absorb and chemically combine ammonia, seizing upon it even in its ordinary conditions of combination in azotized effluvia, and transferring or fixing it in the clay. This property, as described by Liebig, Thompson, and Prof. Way, must be regarded as good proof of the value of dry, calcareous clays for absorbing and neutralizing animal effluvia.

Hospitals.—The hundred and forty pages that Dr. Hammond has devoted to hospitals, the principles of their construction, location, management in the field and in permanent institutions, their lighting, heating, ventilation, etc., are replete with practical instruction. Forty-two woodcuts, twenty-five of which are original, are given to illustrate the principles of construction; and as the author, in his duties as Surgeon-General of the army, must have realized the immense responsibility of ordering suitable provision for not less than a hundred thousand sick and wounded men during the first month of his administration of the Medical Bureau, and of supervising such provision for not less than two millions of cases in field and general hospitals during the succeeding twelve months of service, we feel assured beforehand that what he has written respecting military hospitals and their management cannot fail to command the attention of the medical profession and of the national Government.

After a summary review of the leading features of the more important hospitals of European and American cities, showing what errors and defects should be anticipated in the location, construction, and arrangement of hospital buildings, the author proceeds to state in a very lucid and emphatic manner the true principles of hospital-construction. The following paragraphs illustrate his views:—

"In setting out to build a hospital the first object to be had in view is the provision of ward accommodation; the next the provision of accessories, such as kitchens, water-closets, bath-rooms, offices, etc. We shall therefore first consider the best form for the ward, and the several appointments which should be given to it.

"*Wards.*—A hospital ward should be of an oblong shape, the form which is best adapted for the arrangement of beds, and supplying the patients with sufficient light and fresh air without wasting space. The width should not exceed twenty-five feet, a space which will allow seven feet six inches for the length of each bed, with a passage of ten feet between the rows. If the width is greater than this, the distance between the windows is such as to prevent free ventilation; if less, sufficient room is not afforded.

"In permanent hospitals the height should not be less than fourteen feet, nor over sixteen. Less than this renders the air close, while more is of little or no advantage. In temporary hospitals, such as those often required in the army during war, which are not ceiled, and which are ventilated at the ridge, twelve feet to the eaves will be found to answer if the roof is high pitched—the only kind which should be constructed, as flat roofs are more liable to leakage, and render a ward hotter in summer than those that are steep.

"The length of the ward depends upon the number of beds it is to contain. The bed should be about three feet in width, and the average distance between should be four feet. As they are arranged in pairs between the windows, the two beds of any one pair are not so far from each other as this; but compensation should be made by increasing the distance between the pairs, so that it may average about four feet. Each bed therefore occupies a space in the length of the ward of seven feet, consequently a ward intended for fifty beds—twenty-five on a side—would be 25 × 7 = 175 feet, the length of the ward. A ward therefore of these dimensions (25 × 175 × 14) contains 60.250 cubic feet, or 1205 cubic feet to each of the fifty patients.

"These dimensions are the very lowest which should exist in the wards of permanent hospitals in any part of the United States. Every patient in such institution should receive, as a *minimum allowance*, 1200 cubic feet of space, about 87 of which should be superficial. If less than this is allotted to him, an offence is committed against the laws of human health, which can only be excused on the ground of absolute necessity.

"In temporary hospitals, ventilated at the ridge and furnished with a sufficient number of windows, less than this will suffice, provided they are built after the plans which have been shown to be most advantageous to the sick and wounded who are to inhabit them; and consequently in such wards the length need not be so great as in those of permanently built hospitals. In these ridge ventilated wards, of the same width as the others and the same average height, the mean distance between the beds need not be more than two and a half feet; 25 × 5½ = 137½ feet, the length of a ward intended for fifty patients. Such a sized ward contains 48,125 cubic feet, which is about 960 to each patient.

"This is the basis upon which all temporary hospitals should be constructed, and although, from the necessities of the service, it may often be impossible to give to each inmate as much space as the requirements of sanitary science demand, he should receive it without fail as soon as the exigency, which has caused a reduction in his allowance of space, has ceased to exist."

* * * * * *

"As has been said, the mean height of a ward should not be less than fourteen feet, and it is upon this, as a standard, that the cubic space per patient is to be apportioned. It will not answer to make the walls high and to curtail them proportionally in the other dimensions, for after the height of fourteen or fifteen feet is attained in a ward, the air of any space above that is of very little practical benefit to the patient. It is by no means impossible to produce sickness in well persons by crowding them together in the open air, where the number of cubic feet of air to each is only limited by the height of the atmosphere above the surface of the earth. The number of square feet to a patient, in a ward fourteen feet high, should not, in permanent hospitals, be less than eighty-five, nor in temporary, ridge ventilated wards, less than sixty-five feet.

"The windows of a ward should be of ample size, certainly not less than five feet in height. The number should be determined by the size and capacity of the ward, one being allowed for every two patients."

The plans of the General Hospitals at Fort Schuyler, Point Lookout, Chestnut Hill, and many others, are given in much detail. Like American ideas, those plans are expansive and quite untrammelled by foreign examples. To think of fifty pavilions—each 175 feet in length—arranged tangentially in radii from the periphery of an ellipsoidal court-yard, and there connected by a corridor nearly half a mile in length, which is the outline description of the Monroe Hospital at Chestnut Hill, must awaken some astonishment abroad, where the Titanic magnitude of our war for the Home of Freedom is yet imperfectly appreciated. We most admire the best of these hospital plans for their ventilation and generous allotment pro rata of air-space to the patients, and for the breadth of ground they occupy. And it may be pardonable for a civilian to offer a criticism upon all the larger hospital plans given in this volume: They are *too large*. The aggregation of 2,000 or 3,000 patients upon such limited areas, even under favorable conditions for local drainage and external ventilation, will inevitably, after a number of months, induce endemic or localized conditions of insalubrity that will certainly increase the average period of recovery of the patients as well as augment the ratio of mortality. Though war creates military necessities, its successful issue is so truly "a problem of sanitary science" that the question of life-saving is paramount to all others in the medical department of the army service. It has been well stated by the British Military Hospital Commission, that "it should never be forgotten that the object sought in the construction of a hospital is *the recovery of the larger number of sick men to health in the shortest possible time*, and that to this end everything else is only subsidiary."

Various statements respecting locality, altitudes, and climate, which we find in Dr. Hammond's chapters upon those subjects, warrant the belief that he is fully alive to the advantages that would be derived from the distribution of certain classes of the military patients to hospitals located at higher altitudes and in a drier atmosphere than at the tide level where the principal hospitals have hitherto been located. And in such improved locations we believe the administration will be found more economical, the death-rates lower, and the average period of hospital residence shorter.

The chapter on field-hospitals is exceedingly valuable, but too brief. Surgeon Vanderkieft's, in the oak-openings beyond the Antietam, is justly referred to as "a model for such establishments." We have preserved the statistics of the surgery in that and some other hospitals under canvas upon that bloody field, and never in civic hospitals do we expect to witness such favorable amputations, resections, and terrible wounds. Dr. Hammond strongly recommends that hospital tents or huts, when aggregated, should be arranged *en échelon* as a means of insuring the best ventilation.

Passing the chapters relating to the *lighting* and *warming* of hospitals, in which all is practically and clearly stated that concerns these important matters, we would quote largely from the most excellent chapter on *ventilation*, but like the sections which follow relating to *camps*, *food*, and *alimentary principles*, *physiological relations of food*, *compound aliments*, etc., we would cordially recommend every army officer to peruse these last chapters of the treatise first, for they are fullest of interest and practical suggestions. We cannot forbear the following brief quotations relating to heating, and to ventilation respectively, as illustrating the emphatic and definite opinions of the enlightened author. Speaking of the fashionable subterranean hot-air furnaces, he states:—

"It is only necessary to allow a piece of polished silver to stand for a few days in a room warmed in this manner to be convinced of the presence of the vapor of sulphur in the atmosphere, as the silver very rapidly becomes tarnished by the formation of the sulphuret. I have also caused the warmed air to pass through Liebig's potash bulbs, and have always found an excessive amount of carbonic acid to be present, and yet I have seen educated persons, or those who from their position in life ought to have known better, crowd themselves, to the number of five or six, into a room scarcely fifteen feet square in which there was no window, in which two gas burners were lighted, and with the doors shut, crouch over a flue from a red-hot furnace through which air hot enough to parch the skin was being discharged with horrible rapidity. Should it be a subject for surprise that such persons were annoyed with coldness of the extremities, and were haggard and ghastly-looking in the morning, and that they were afflicted with almost constant headaches, dyspepsia, and other affections evincing disorder of the organism? As used in this country, hot-air furnaces, I have no hesitation in saying, are productive of more disease and discomfort than are caused by all the other means of producing artificial heat combined."

And respecting the amount of fresh air-supply to meet the physiological requirements of respiration, Dr. Hammond brings forth the following statement, which corresponds with the standard that our own observations long since led us to establish in the management of hospital wards.

"Thus Vierordt fixes the amount at 2½ cubic feet per minute, Dr. Reid at 10 cubic feet, and Dr. Arnott at 20 cubic feet. The first of these is undoubtedly too low, and the last cannot be considered as at all too high. From the nature of the problem to be solved, and from the many influences in operation capable of affecting the result, it is extremely difficult, if not impossible, to arrive at exactness. It may, however, be safely affirmed that, in a ward in which 1200 cubic feet of air are allowed to each patient, this amount should be entirely changed in each hour at the most, and this would require the admission of 20 cubic feet per minute for each patient. An allowance of 30 to 40 cubic feet per minute would, however, be far preferable. The object should be to render the atmosphere of the ward, as nearly as possible, similar in composition, as regards carbonic acid, aqueous vapor, and organic matter present, to that of the external air."

The closing chapters of the treatise treat especially of the alimentation and clothing of the soldier. Like all that precedes these subjects they are treated with reference to the practical questions and necessities of army life. The volume itself is a sort of epitome, as we imagine, of the first year's official duties of the Chief of the Army Medical Bureau. Indeed, this opinion is warranted by a casual remark in the preface, where the author says:—"There was no work then to which I could refer those who came to me for information; * * * and as I had for several years given a large portion of my leisure to the study of hygiene, * * I concluded to devote the hours which would otherwise have been passed in rest, in preparing a volume upon the more important subjects belonging to the science of hygiene, especially those that have a bearing upon the military service."

Of this work, which, to say the least, should command the grateful appreciation not only of public hygienists, but of the National Government, the author states, "It is not pretended this volume is complete. There are several subjects other than those considered, such as Occupation, Exercise, the Excretions, Marriage, Celibacy, etc., which I would have been glad to have taken up, had I not been convinced that the need for some work on sanitary matters was imperative."

This patriotic and noble motive for preparing the treatise is most appropriately and beautifully testified in the dedication of the volume to Dr. Wm. H. Van Buren, whose eminent position and distinguished labors in the medical profession, and in the United States Sanitary Commission, are thus appropriately recognised by his former pupil. And it is no trivial encomium upon this book to say that the style, scope, and subject matter of its well digested chapters, its advanced status in scientific as well as severely practical arguments and statements, together with the superior typographical execution and illustration of the volume, are in every respect worthy the distinguished position and repute of its author. It is a book that must make its way into every physician's library, and which will be demanded in every medical class-room; and its future and enlarged editions, or supplementary volumes, will be earnestly looked for by all the cultivators of sanitary science.

Erratum.—The writer of the review of Dr. Hammond's treatise requests a correction to be made in the first paragraph from the bottom of last column, on page 163, in last number of this Journal. The words *cubic inches* are to be substituted for *cubic feet*, wherever the latter words occur in that paragraph.

He adds the following facts: It will be observed that the experiments of Dr. Hammond and Dr. Angus Smith, have unequivocally demonstrated the fact, which has been believed upon rational grounds, that deleterious organic and putrefactive matter rapidly accumulates not only in crowded apartments but in unventilated and damp places. The following table gives some of the results of Dr. Smith's tests of the atmosphere of various localities, with reference to ascertaining the absolute proportion of such noxious matters liable to be respired in those places:—

			cub. in.
1.	Air at All Saints inside the laboratory	1 grain in	72,000
2.	Front of the house	,,	74,000
3.	Behind the laboratory	,,	60,000
4.	Bedroom looking to the back . .	,,	64,000
5.	Same room in the morning after being slept in	,,	56,000
6.	Front of laboratory again . . .	,,	76,000
7.	Back of the Medlock behind dirty houses	,,	44,000
8.	St. Michael's-place behind a house .	,,	8,000
9.	Inside a house at St. Michael's-place .	,,	16,000
10.	The front of the house	,,	40,000
11.	High grounds 30 miles north of Manchester	,,	209,000
12.	Closely packed railway carriage . .	,,	8,000
13.	When the strong smell of a sewer entered my laboratory	,,	8,000

"Leaving out the three cyphers, we have a range of from 8 to 200, and I feel assured that we may go much lower than 8, as I entered no spots which were very revolting."

"The air of ash-pits, or rather of middens and cesspools such as the repositories of fæces essentially are in Manchester, was tried, and gave

	grs.		cub ft.
1.	1	of organic matter in	62·2
2.	1	"	62·2
3.	1	"	58·9"

"We have in different air breathed by people in the same county, a substance the amount of which in one case is 22 times greater than in the other, and in air breathed by people in the same town a difference which is as 9 to 22.

"These differences are not greater than are required in order to enable us to account for the numbers which represent the deaths of the various districts. In the district in which the highest numbers here given were obtained, there were, in 1855, 4·5 deaths in a hundred, whilst the average is 2·2 for the country."

Such facts require no comment, but they are exceedingly instructive.

Army Medical Intelligence.

ORDERS, CHANGES, &c.

Surgeon J. Owen, U.S.V., has been dismissed the service of the United States.

Surgeon Madison Mills, U.S.A., has been relieved from duty in the Department of the Tennessee, and assigned as Medical Director to the Department of the Missouri.

Surgeon Josiah Simpson, U.S.A., Medical Director, Middle Department, has been ordered to visit and inspect in hospitals and elsewhere, such officers and soldiers belonging to regiments on duty in the Middle Department, as are reported at those Headquarters, "absent sick," beyond the expiration of their furloughs. He will designate to Provost-Marshals those fit for duty for immediate return to their regiments, and provide the necessary certificates of disability for discharge or transfer to the Invalid Corps, in cases requiring such action. All officers and men designated as fit for duty will be immediately sent to join their respective regiments.

Seven hundred wounded rebel prisoners have been ordered from Chester, Penn., to Point Lookout, Md.

A person, calling herself "Mrs. Major Gage, Surgeon U.S.V.," has been representing herself to Surgeons in charge of hospitals in the North, as holding the President's commission as such, and demanding quarters, fuel, etc. It is needless to say that no such person is known or recognised by the Medical Department.

Original Lectures.

CYANOSIS.

BEING REMARKS MADE IN THE DISCUSSION OF DR. LEWIS SMITH'S PAPER AT THE STATED MEETING OF THE N. Y. ACADEMY OF MEDICINE, HELD MAY 14, 1863.

By A. JACOBI, M.D.,
PROF. OF DISEASES OF CHILDREN AND INFANTILE PATHOLOGY AT THE N. Y. COLLEGE AND CHARITY HOSPITAL, N. Y.

I claim that the profession is under great obligations to Dr. Smith for having prepared his paper. Medical publications have been replete with single cases of Cyanosis for twenty-five years past, but complete reviews of a large number of cases have been very rare. It is true that some such are to be found in text-books and some in medical journals, but the collection of cases made by Dr. Smith is, as far as I know, as great in number as can anywhere be found. Dr. Smith is modest enough to excuse himself for writing such a paper, but when we still see in one of the latest books on diseases of children, Dr. Tanner's, that it is laid down that the cause of cyanosis is the patency of the auricular septum, there certainly is call enough for such a paper as that which we have come together to discuss.

There are parts of the paper of such excellence that I deem it altogether unnecessary to use up time in going over the ground again. I wish, however, that I could say the same of those portions of the paper which treat of the definition of cyanosis, and its etiology and pathology.

First, the Dr. says that "cyanosis is actually a blood disease;" that "its pathological state may be expressed as follows:—Blood venous in character in the arteries as well as veins. It would be better did its name express its nature, as in leucocythemia, but medical nomenclature is generally defective. A symptom or appearance is often selected as a name, and no harm is really done, provided we are not led into the belief that this symptom or appearance is the disease itself." This then would be my first objection to the paper, that cyanosis is taken as a disease, the true character of which is due to nothing save the condition of the blood. In another place the Dr. says that "there seems to be a tendency on the part of some to ignore cyanosis as a disease:" if that is a tendency really manifest, I believe it to be a very good one.

The Dr. gives 14 distinct malformations which are capable of causing cyanosis, and besides, mentions other conditions capable of inducing it, such as overloading the stomach, violent exertion, etc.; and finally, on page 316, he details the causes of death in cyanosis, which it must be admitted are very variable. We have in this catalogue, dyspnœa, convulsions, apoplexy, hæmorrhage, phthisis, exhaustion, coma, cerebral irritation, effusion into the cranial cavity, thoracic inflammation, diarrhœa, scarlet fever, croup, and so on, and so on. Now I believe that when we have fourteen malformations, every one of which may be the cause of cyanosis and a number of other diseases, which may be the cause of death, we have no right to look upon cyanosis as a disease *per se*. He says: "It would be better did its name express its nature, as in leucocythemia," etc. Now the term leucocythemia means nothing but white-bloodedness: it is simply a condition in which the normal relation between the red and white corpuscles is changed in a certain manner. There are now, too, two varieties of this same leucocythemia, which it has been found necessary to make, in order to express the precise condition of things which exists with this symptom (for it is only a symptom), viz. the splenic and the lymphatic. Therefore, Dr. Smith's comparison is not tenable. During the last century the diagnosis of a case was considered as made when it was called dropsy. Nowadays none of us would make such a diagnosis; we would be ashamed to do no better.

There are a number of cases of cyanosis that terminate fatally within a very short time, and though during life we may call it cyanosis, we will find after death that the cause had been either lobular pneumonia or atelectasis. We then have it proved to us that cyanosis was but the symptom of the protracted difficulty that existed. Thus, in my opinion, the attempt on the part of Dr. Smith to prove that cyanosis is a new disease, is only an evidence of a retrograde movement in medicine.

As our object in the discussion of any subject is to arrive at the truth by the free expression of opinion, I shall take the liberty of alluding to what I consider the weak points of the paper. One of the weakest points in the paper is that which treats of the etiology of the disease. The Dr. says:—"The cause of the malformation on which cyanosis depends is wrapt in much obscurity. Sometimes mothers attribute it to strong mental impressions felt during uterogestation. The mother of a patient treated by Dr. Peacock stated that, 'two months before her confinement, she was frightened by seeing a child killed, and never recovered from the shock she sustained.' In another case 'the mother was much out of health, and stated that, when pregnant with the child, she was greatly alarmed by seeing a man who was dying of asthma.' In another instance the mother was frightened at the fifth month of pregnancy; and in still another case, recorded by Dr. Peacock, the mother, four or five months before her confinement, 'was greatly alarmed by her husband, who was insane, standing over her for two hours with a loaded pistol.'" Now it would be better for Dr. Smith, before he gives credit to, or barely mentions such causes, to go a little into the study of embryology. It is not necessary to go into this subject to any great extent to know that first there is a period of development in which there is no septum whatever, either in the ventricle or auricle. The formation of this septum belongs to the first few months of fœtal life: the formation of this septum is sometimes not complete, and sometimes differs a little as to its position. When the auricular septum is not complete, we have the foramen ovale remaining open, or we have no septum, or we have, in the case of the ventricular septum remaining open, a perforated septum ventriculorum; or we have no pulmonary artery, but only an aorta, and so on. As to their position, the septa may be found either too far to the right or to the left, and thus give rise to the abnormal origin or transposition of blood-vessels. Where the auricular septum is found too far to the right, the inferior v. cava is found to discharge its contents into the left auricle. Where the ventricular septum is found too much to the right side, the pulmonary artery originates from the left ventricle, or from both the right and left. Where the same septum is found more to the left, the aorta originates wholly or partially from the two ventricles. In this case there may be also a vicious development of the ventricles themselves. The third period of fœtal development must be considered as directly introductory to later life: the v. cava inferior moves to the right, the valve of the foramen ovale fits the margins of the foramen, the former aorta ascendens is transformed into aorta, the descendens into pulmonary artery, while the ductus arteriosus Botalli decreases in size. Where the vena cava inferior does not extend sufficiently to the right, the valve, being only a duplicature of the living membrane, does not cover the foramen entirely; it then remains open. Where, however, the reverse position takes place, the foramen will close too early.

At this period, also, must be sought the first occurrence of atheromatous degeneration and incompetency of the valves, with or without either contraction or dilatation of the orifices; also, a number of anomalies in the character and size of blood-vessels, especially the pulmonary artery. There are two anomalies in its case, which have frequently been confounded with each other: the obstruction or contraction of the conus arteriæ pulmonalis, which is very frequent, and the contraction of the ostium. The latter will result from nothing but inflammation and contraction of the valves, and their ring of insertion. The former, also, must not be taken as a simple arrest of development, but as the result of an inflammatory process. Simpson already believed in inflammation as the cause of these arrests of development; Bouillaud attempted to localize inflammation in the lining membrane, thus attributing those anomalies to endocarditis; and, finally, Dorsch has proved to my satisfaction that the conus arteriosus of the right side is principally due to inflammation of the muscular substance, myocarditis proper. When this process takes place in very early fœtal life, its residues may disappear, nothing being visible afterwards, except either a very narrow slit or complete obstruction of the pulmonary artery. In the majority of cases, however, a hard and dense tissue is found, a cicatrix of fibrous tissue, indicating the last stage of the process. It is true that no recent case is on record, but only such in which the process has run through its full course. But this fact is easily explained by the other fact, that this inflammatory process includes very little, if any, danger for the continuation of fœtal life to its normal termination, thus depriving us of every opportunity of seeing a case in its first stage. It is but natural that, by the described anomaly, the development of the conus arteriosus is arrested; at the same time the foramen ovale is kept open by the blood being not expelled with sufficient ease, and the valves of the pulmonary artery, and the artery itself, remain delicate and small. At the same time, and from the same cause, the formation of the ventricular septum is interfered with—I speak of that early period in which the formation of this septum is barely commenced with—and the aorta will be found to originate from the two ventricles at once. This anomalous origin of the aorta results in the necessity of its supplying and controlling, in later life, both the large and the pulmonary circulations.

What do we know of the remote causes of all these anomalies depending on myocarditis? Very little indeed; not more, in fact, than of the remote causes of the majority of other diseases in extra-uterine life. But it may be noticed as a remarkable fact that, almost without exception, the malformations of the heart of the new-born, of whatever nature, are found in its right side. This fact must be explained by the physiological action of the right heart, which by far exceeds that of the left, from the well known laws of fœtal circulation. Thus, I have no other explanation to offer but this:—That the cause of morbid changes and functions must be sought for in its physiological over-exertion. Whatever organ or part of the system has to make the greatest efforts, to undergo the greatest exertions, is always most apt to exchange its physiological condition for a pathological one.

I cannot leave the subject without alluding to the several theories proclaimed as the true explanations of every one of the numerous cases of cyanosis, viz:—

1. Obstruction of venous circulation.
2. Mixture of arterial and venous blood, and
3. Want of oxygenization.

I claim that not one of these theories suffices to explain every single case of cyanosis. It will be readily understood that a single exception to a rule proclaimed as general, would reverse the assertion of uniformity in the cause and character of cyanosis.

It is true that many cases of cyanosis originate in venous obstruction depending on overloading the right heart, or at least it can be said that in many cases this obstruction and even enlargement of the veins can be found. This was especially distinct in the case of a cyanotic child who died at Ward's Island, some five years ago, at the age of five years. It was a case of absence of the pulmonary artery, the aorta originating in the two ventricles. I owe to the kindness of Dr. Simrock, then a resident physician of the Emigrants' Hospital, the specimen, together with some notes concerning his ophthalmoscopic examination of the retina of the patient, made some time before death. He says:—"The ophthalmoscopic examination of the eyes of the cyanotic child revealed an enormous but equally distributed dilatation of all the veins of the retina, to such a degree that up to the most peripheric ramifications their width appeared to have doubled, and even more. In short, their calibre was so much enlarged that I have never seen its equal or similar. The arteries of the retina were of the normal size. The retina appeared a little more red than usual, but could not be termed cyanotic, as it showed nowhere the least bluish tinge; nor was the color of the veins blue, but of a dark reddish tinge. No pulsation of the vessels of the retina could be seen, unless artificially produced. Otherwise, the condition of the retina in both eyes was normal. The vessels of the choroid could not be perceived."

But there are a number of cases of congenital contraction of the pulmonary artery in which no cyanotic hue was perceptible during life. Nor do we know else but that in common cases of overloading of the right heart, local congestion, and hemorrhages, or anasarca, or diarrhœa, and the other symptoms of intestinal catarrh, or varicose dilatation of the hæmorrhoid veins, or headache, etc., according to the locality and power of venous obstruction, all these symptoms are found rather more frequently without than with cyanosis. It has been stated, however, that the slowness of circulation in the newly born is such as to give rise to cyanosis before dropsical symptoms can set in. This is not so. We all know the slowness of circulation in an attack of syncope; the surface is pale, but not in the least cyanotic. And the single case of Duchek's, of an infant of three days suffering from all the symptoms of general dropsy, in consequence of disease of the right heart, without being cyanotic, would reverse the plea of slow circulation.

Further, the theory of the admixture of arterial and venous blood, supported by Gintrac, Corvisart, Gendrin, Aberle, Hope, etc., is not applicable to all the cases of cyanosis. There is the case of Bresschet, in which the subclavian artery originated directly in the pulmonary artery. In that instance the arm was supplied with venous blood, but yet there was no local cyanosis. There is another case of Rees, where the abdominal artery originated in the pulmonary artery, but nevertheless there was no cyanosis in the corresponding locality. This is a strong argument against the second theory. And, furthermore, we know that in the fœtus there is a constant commingling of what may be called arterial and venous blood, and nevertheless there is no cyanotic hue on the surface of the fœtus. Again, we have the cases reported by Bizot, Rokitansky, and many others, of large openings in the auricular septum, and no cyanosis. Lacroix found an opening of the size of a five-franc piece, and no cyanosis; Zehetmair found a heart without a ventricular septum, and no cyanosis. I take the liberty of here showing part of the heart removed from the body of a woman of about 50 years, in the dissecting-rooms of the New York Medical College. There are two openings in the auricular septum, one one-sixth, the other one-fourth of an inch in width, and no cyanosis. But I state at once, that the openings are oblique, and were certainly closed by the bilateral pressure of the blood during the systole of the heart.

The question is—How such a mixture could go on at all? Generally, whenever the foramen ovale was found open, or a deficiency in the septum of the ventricle, it was taken for the full cause of cyanosis; but as far as the foramen ovale is concerned, I have to state that in 1000 cases of post-mortem examinations but 440 were found to show some perforation of the foramen ovale, and in none of these 440 cases was there cyanosis. There are a number of cases in which the foramen ovale was an inch large in the adult, and yet there was no cyanosis. There was no cyanosis in cases where the ventricular septum had a perforation of one-quarter to one-half in diameter. How is this? It simply shows, that the contraction of the two sides of the heart is simultaneous—each one of the two has the same amount of work to perform, and consequently the different currents are not disturbed. If, however, the amount of contraction is unequal in consequence of valvular diseases, or hypertrophy of one side, this equilibrium is not kept, and we accordingly have a commingling of two currents.

In consequence of the many objections to the universality of the mixture theory, it has been given up by the majority of medical writers. They followed the same erroneous impression which prevails in Dr. Smith's paper, that, necessarily, there must be a common essential cause to all the cases of cyanosis. With the same reason you would have to look for one and the same anatomical cause in different cases of anasarca, or diarrhœa, or hæmorrhage. In order to show how wrong they are, and how little Dr. Smith's theory will stand a thorough examination, I present a specimen taken from an intensely cyanotic girl of five years. In this heart, which is of normal size, the two ventricles are of nearly the same size; the right auricle is but the common sac for the normally developed veins. The pulmonary veins are fully developed, showing that they have always been swelled with a normal amount of blood. There is not a single abnormal valve, every one being competent. The aorta is very large up to the arch, and originates in the two ventricles; its valve is competent. Its size diminishes in the same degree as it sends off a large number of large bronchial arteries (in the specimen you count twenty-two), which have to supply the lungs with blood in lieu of the pulmonary artery, which is too small to carry more than one-fifth of the normal amount of blood, but is normal otherwise. The numerous and large bronchial arteries are evidently fully sufficient to supply the lungs. The size of the pulmonary veins, moreover, proves that they have their full duties to attend to. There is no symptom of overloading of the heart; there is, in fact, nothing which "prevents the free and regular flow of blood to, through, and from the lungs." And yet there was the most intense cyanosis I have ever witnessed. After having examined this specimen repeatedly and scrupulously, and submitted it to the most critical examination of medical friends, as I herewith do to yours, I claim it as a proof of my assertion, that this was a case of cyanosis depending on the mixture of arterial and venous blood. Thus I wish you to dispose of those who gave up the mixture theory because it did not explain every case, and selected another not more satisfactory; and also of the theory of Dr. Smith, who says, that "cyanosis is due to vices, or defects in the organism, usually congenital, which prevent the free and regular flow of blood to, through, or from the lungs." When we think of the large number of bronchial arteries supplying the lungs, and of the numerous collateral ramifications from the intercostal and internal mammary, which assume the same function by taking the place of the pulmonary artery—vessels which Dr. Smith kindly believes to be generally overlooked by other anatomists—and further, when we bring into account the usually normal size of the pulmonary veins,—all of which you will also perceive in two other specimens I have with me: Dr. Smith's theory is simply reduced to the old theory of Billard, Hunter, Sandifort, Nevin, and others. This theory explains every case of cyanosis by deficient oxygenation, no matter whether the local cyanosis depending on local compression of veins could be explained by this theory or not; nor that the fœtus is not cyanotic, although greatly inferior in the amount of oxygen contained in the materno-fœtal blood.

It is true that the majority of malformations cyanosis is found with, fall under the head of Dr. Smith's theory. But if his theory was the right one, we ought to see cyanosis in every case where circulation to, through, and from the lungs is effectively interfered with; thus, in every serious case of pneumonia, particularly when bilateral, emphysema, and a number of valvular diseases. This, however, is not so. Thus the theory of Dr. S. is inconsistent with true pathology for two reasons: 1stly, because there are cases of cyanosis which evidently have other, and distinct causes; and 2ndly, because in many cases in which the anatomical condition required by his theory is present, there is no cyanosis.

I say again, that any theory which is to yield a universal explanation of, and to be identified with cyanosis, must not allow of a single exception. Every single case explainable by other causes diminishes, or rather destroys the probability or possibility of its being the true theory. And thus, as hitherto, we shall have to explain the symptom called cyanosis, sometimes by an obstruction of circulation, sometimes by the mixture of arterial and venous blood, sometimes by deficient oxygenization, and at other times by a complication of two or more of these causes. It may even happen that we have to call in other, more subordinate causes. Who, for instance, can tell whether or not the deficient nutrition of the nervous system, and particularly of the pneumogastric and sympathetic nerves, resulting from the mixture of arterial and venous blood, may not bring on a retardation of peripheric circulation without the presence of a mechanical obstruction?

Medical science has long attempted to become free from terms indicating a symptom or a complex of symptoms, which formerly assumed the dignity of diseases in the vocabulary of pathological anomalies. Where we are enabled to arrive at an anatomical diagnosis, we do not make use of such terms. Thus many a case which formerly would have been called cyanosis in a newly born, is at present congenital pneumonia, or atelectasis, or incompetency of a valve, with cyanosis among the accompanying symptoms. In the same manner we do not diagnosticate dropsy, but a distinct cardiac disease, or fatty degeneration of the kidneys, or cirrhosis of the liver, etc., with dropsy among the symptoms.

I claim, then, cyanosis as a common symptom of a number of different anatomical lesions, either congenital or acquired, and deny its essentiality as a disease *per se*.

Original Communications.

IS ANTE-FLEXION OF THE UTERUS,

WITHOUT LEUCORRHŒA OR ENGORGEMENT AND ULCERATION,

A PATHOLOGICAL STATE

REQUIRING SPECIAL REMEDIAL TREATMENT?

By S. OAKLEY VANDERPOEL, M.D.,

OF ALBANY, N.Y.

Of late years a great impulse has been given to the progress of uterine pathology. The study of the ovum and its development has been greatly perfected, while the improved methods of exploration have enabled pathological states to be readily and promptly recognised. It is, however, in the observation of organic lesions and their remedial agencies that the greatest progress and true amelioration may be said to be attained. The boon to humanity conferred in this study by a few earnest, noble men, we consider inestimable. In acknowledging fully this obligation, let me not be misunderstood if I criticise strongly that disposition, I might say *fashion*, now so prevalent in the profession, to see in every ailment which the female presents a *uterine* disease, and find in every accidental condition which the uterus presents, upon an examination by the speculum, the *fons et origo* of all her ailments. So fashionable is it, that nearly every village, certainly every water-cure establishment, has its doctor who dexterously uses the speculum, and who faithfully applies his caustic to the inflamed follicular surface of the cervix with the same industry that a few years since it was applied to the fauces, to neither of which would any permanent benefit result unless at the same time the depraved condition of the general system was improved.

Progressing on this one-idea theory, the different accidental positions of the organ have been persistently treated; some employing the ingenious contrivance of the stem pessary and its resulting tortures; others, the daily straightening the uterus by introducing one finger into the vagina and another in the rectum or over the pubes, according to the nature of the deviation. It seems hardly credible so absurd a process as this latter should be gravely pursued. We certainly have more respect for the man who administers his infinitesimal dose of oyster-shell than for the one who will for weeks practise this latter upon his confiding patient.

It is the object of this paper to inquire how far one of the most commonly assigned deviations, viz. "simple ante-flexion of the uterus," without engorgement or ulceration of the cervix, and without any leucorrhœal discharge, may be considered a pathological condition demanding *special* remedial appliances. We answer, a condition of the organ presenting the above characteristics does not require special remedial appliances. Further, that when presented in a patient with enfeebled system, she will recover equally well without them; that, when recovered, the vicious condition of the organ may continue without inducing disturbance, or in any way affecting the general health. According to careful researches of M. Soudry, conducted under the supervision of M. Barthez of Paris, ante-flexion may be considered almost the *normal* condition prior to puberty. Twenty-three per cent. of those examined presented this condition of the organ. It becomes less and less frequent after puberty, and disappears where pregnancy has occurred. This condition, then, so constant in early life, should not excite surprise if discovered in the female who has never been pregnant. M. Aran explains this state as follows: "This ante-flexion of the uterus has really nothing mysterious or difficult to understand; it is nothing more or less than the result of pressure exercised during fœtal life by the abdominal viscera upon the still soft and little resisting part of the uterus; that is, upon the body, when that organ is still inclosed in the abdominal cavity proper." If, then, ante-flexion prior to puberty may be regarded rather as the normal state, surely its presence after this period, where no conception has occurred, and where no indications of suffering of the organ, as indicated by engorgement or ulceration of the cervix, or uterine leucorrhœa, present, need not be considered a pathological state demanding special remedial agents. Rather should it be the aim of the physician to foster that instinctive delicacy, the charm and attraction of the sex, than by daily manipulation blunt the finer elements of her nature.

We have, in addition, the testimony of late writers upon this subject; M. Aran, in his clinical lectures on "Maladies de l'Uterus," says: "Flections of the uterus have not, in general, as unhappy an influence upon the health as many other uterine affections. Many females carry them all their life without notably suffering therefrom. Some appear more innocent than others, such as *ante-flections* and latero-flections of the body of the organ; the different flections of the uterine neck—"

Scanzoni, than whom a more careful and truthful observer, or a more clear and concise delineator, has not written, says: "In the commencement of our practice we were ourselves of the number of those who, as Kiwisch, Mayer, Simpson, Valleix, and others, could not too highly estimate the baneful influence of *flexions* upon the whole constitution of the sufferer. We avow even that it is not without difficulty to renounce an opinion which even to this day has been considered by a great number of our most illustrious confrères as one of the greatest advances of our science. Nevertheless, in view of so great a number of facts proving the contrary, it has been impossible *not* to change our opinion. So that now we are convinced that *flections of the uterus do not acquire any importance, are not followed by serious dangers, except when they are complicated with some other alteration in the tissue of the organ.*" It is not of course necessary to enumerate the reasons by which this conclusion is reached.

One point, however, cannot but have struck every practitioner. After rising from the perusal of the careful descriptions given of the different forms of deviation of the uterus, and profoundly impressed with the necessity of exerting all his skill and energies to their correction, when presenting in his practice, yet in his daily experience he is constantly reminded of the *perfect indifference*, so to speak, of position which the uterus takes in the pelvic cavity, while the individual is in this part without suffering, or any manifestations of a morbid condition. Sometimes the cervix is almost in the vulva; again, resting on the floor of the vagina, tilted to the pubes, or inclined to either ilium. Shall we arbitrarily assume these as morbid conditions, and place our patient, unconscious of any such state, under specific treatment? Yet such, we fear, is too much the tendency of the day. If innervation be at fault, from imperfect assimilation, and a relaxed tonicity of the muscular system follows, the uterus, through loose attachments and elastic ligaments, is among the first organs to show it by some deviation, yet without any positive exhibition of suffering from the organ itself. Such cases, we contend, do not require local treatment. The uterus, by all appliances, either local or derivative, will never assume its normal position until the tone of the general system is rendered healthy. This accomplished, there will be no call for further local manipulation.

To us it seems absurd to argue against the necessity of either derivative treatment or local manipulation for a simple ante-flection, without any accompanying signs of suffering in the uterus, did we not know that it was deliberately advised and acted upon. We have seen ladies who, almost daily for three months, were subjected to manipulations for straightening an ante-flexed uterus with the finger; others, anæmic and with deficient innervation, subjected to issues for the same purpose. In either case it was not pretended but that the ante-flexion had existed a long period; if so, the tissue of the anterior wall must be condensed, and that of the posterior extended. Would any such measures produce an equilibrium between them? Analogical reasoning shows its futility.

If suffering does result, and which we do not deny may and does occur, it will be manifested in some manner by the organ itself. Then the treatment of supporting the uterus by some form of stem pessary, would seem the only one from which benefit could be expected. Comparatively few, however, can tolerate them, and our experience has been that patients leave the hands of those who have specially treated them for this affection no better in this respect than when the discovery of ante-flexion was first made.

We have been drawn into the foregoing train of thought from the *fashionable* prevalence of viewing every disease of the female of *uterine origin*—of studying that whole system of harmonies from a single stand-point, and attempting from that to comprehend the whole.

Much as we extol and commend the principle in some departments of the profession, of devoting the time and energies to a single branch, there are others in which it degenerates to a one-ideaism, and belittles rather than enlarges the domain of our science. To such tendencies we must enter a stern protest. While the uterine system is the starting-point from which sympathetic suffering radiates over the whole system, it is quite as often but secondarily implicated. It should be the duty of the honest interpreter to give such condition its true signification, not unduly elevating a slight pathological condition into an explanation for long continued and severe sufferings in other organs.

Sept. 30, 1863.

M. Debout says that sugar is an excellent destroyer of worms. He once accidentally put sugar instead of salt on a leech which he wished to detach from the skin, and was surprised at the spasms produced by it. He therefore tried sugar on earth-worms, and found it had a similar powerful effect; and has since used it in solution with success as an injection in children.—*Brit. Med. Jour.*

REMOVAL OF BROKEN CATHETER

FROM BLADDER.

By SURGEON C. S. MUSCROFT.

MEDICAL DIRECTOR, U.S.A.

Jacob Sheets, a corporal of Co. I, 101st Ohio Vol. Inf., was admitted into one of the hospital depots of the 3d (Maj. Gen. Rosecrans) Division, 14th Army Corps, in the Dept. of the Cumberland, on the 1st day of January, 1863, having been wounded on the day previous by a ball (supposed to be a minié) at the battle of Stone River.

The ball entered from behind at the inferior border of the gluteus maximus muscle an inch and a half to the right of the mesian line, and passed obliquely forward and upwards, wounding the urethra in the posterior third of its spongy portion; then making its exit at the superior portion of the scrotum half an inch to the left of the raphe, it having passed through the superior third of the left testis. When the patient was first admitted, his penis and scrotum were enormously œdematous, with ecchymosis extending above, over nearly the whole of the hypogastric and iliac regions. When he attempted to urinate, the water flowed freely from the wound anteriorly; consequently he had voluntarily retained his urine for twenty-four hours. A silver catheter was now introduced, and the contents of the bladder evacuated, after which a gum elastic catheter was substituted, and left in the urethra, being confined there by suitable dressings. The catheter was so arranged as to conduct the urine into a glass bottle. Compresses wet with cold water were applied to the inflamed parts.

Jan. 3d.—The scrotum appeared nearly the same as on the first, except that it was softer and fluctuating. The penis was still swollen, discolored, and œdematous. Two incisions were made through the covering of the testes into the sac of the tunica vaginalis. The discharge of pus and fœtid urine was abundant.

Jan. 5th.—The ecchymosis in and about the penis was much diminished, but a portion of the scrotum was evidently gangrenous. A line of demarkation had formed on the seventh, and on the tenth had separated, leaving the testes bare to the extent of nearly the whole of their anterior surface.

Adhesive straps were then applied to the remaining integument of the scrotum, drawing the edges together as near as possible, to form an anterior covering.

About this time the urine became loaded with sediment, leaving a light colored gritty deposit on the end of the catheter which protruded into the bladder, also filling the whole of the length of its tube, preventing the passage of urine.

This was removed, and another introduced. In three days, it became filled with deposit in like manner to the former one, and another of smaller size (which was the only one at hand at the time) was introduced.

On the following morning (the 25th) I was called to see the patient, and found that the catheter had been broken off about midway; the distal end, which was the longest, having fallen out of the urethra, the *other* remaining in, the outer end of which could be distinctly felt with a probe.

In this emergency I called upon Surgeon C. S. Muscroft, the Medical Director of the 3d Division, who readily responded, bringing with him a long, straight, narrow bullet forceps, which was the only instrument in his possession that promised any success in the extraction of the remnant of the catheter. The patient was put under the effects of chloroform, when it was found on examination, that the remaining end had receded behind the symphysis pubis into the membranous portion of the urethra, and could *not* be reached with the straight forceps. Here Dr. Muscroft ingeniously improvised a curved forceps by heating those he had in the stove, and bending them to the proper curvature over the window-sill. The patient being still under the influence of chloroform, the forceps were again introduced, and after persevering efforts, the broken piece of catheter was nicely and firmly grasped, and extracted.

The catheter was not again introduced, but pressure with compresses and adhesive straps was made around the urethra with a view to re-establish the natural urinary channel and obliterate the fistulous opening.

This was successfully accomplished. The urine was voided freely from the meatus externus, none escaping at the wound.

On the 27th, the patient had a heavy chill, and on the following day complained of great pain in the perineum at the right and lower portion; a slight degree of redness and swelling was perceptible. On the fifth day following, an abscess had formed, which was punctured, and discharged a large quantity of pus. From this time forward the patient steadily improved, and was discharged from the hospital cured.

Third Div., 13th A.C.,
Dept. of the Cumberland.

B. C. Brett,
Assist. Surg. 21st Reg. Wis. Vol. Inf.

EXPULSION OF TÆNIA BY THE PUMPKIN SEED.

By THOS. M. FLANDRAU,

SURGEON 146TH N.Y. VOLS.

In the case of a girl, æt. 12 years, I administered two ounces of the pumpkin seed, grated with half a pint of sweetened water, after a fast of thirty-six hours. Nothing but tea was allowed during this period. One ounce of castor oil was taken two hours after the seeds.

About twenty feet of the tape-worm were passed during the action of the cathartic.

As I left town to rejoin the army on the day the prescription was made, I am unable to state whether the head of the worm was evacuated. No other vermifuges had been used.

A protracted fast being regarded as an important point in this method of expelling tænia, it is perhaps worth the trial to decide what would be the effect of the castor oil, so given, without the pumpkin seed.

Camp near Culpepper C. H., Va.,
Oct. 8, 1863.

TWO CASES OF HOSPITAL GANGRENE,

OCCURRING WITHOUT PREVIOUS WOUND.

By FRANK H. HAMILTON, M.D.,

PROF. MILITARY SURGERY AND FRACTURES AND DISLOCATIONS
IN THE BELLEVUE HOSPITAL MEDICAL COLLEGE, N. Y.

Case I.—General Hospital No. 4, Nashville, Tenn. Westley Frost, of the 85th Illinois Vols., was convalescing from a severe attack of pneumonia, when, about the twenty-second of March, 1863, a small vesicle appeared upon the front of his right leg, where the skin was perfectly sound. This soon dried up, became black, and the sloughing commenced.

This man had never had syphilis, or any other constitutional specific malady, but at the moment of his attack he was exceedingly feeble. There were at the same time two or three cases of hospital gangrene in an adjoining ward, but none in the ward which he occupied.

On the fourteenth of April, when my attention was first called to him, the gangrene had been corrected by bromine, but the ulcer covered eight inches by four of superficial surface, and the shaft of the tibia was dead.

Some time during the month of August, by the courtesy of the surgeon in charge of the hospital, I was permitted to remove the dead bone, which was fouud to include all, or nearly all, of the tibia intermediate to the epiphyses. I have seen him several times since then, and find the wound cicatrizing finely, and his general health steadily improving.

II.—On the 26th of March, 1863, I saw, in General

Hospital No. 7, at Louisville, Ky., a Confederate soldier, Travis Austin, with two large ulcers, one upon the right wrist and the other upon the right leg, near the ankle, both ulcers being the result of hospital gangrene, which had been arrested by the use of bromine, applied as recommended by Dr. Goldsmith.

I was informed that he had not been wounded, but that he was admitted on the fifteenth of February, 1863, with purpura hæmorrhagica. He had been living a long time without fresh vegetables, and he was no doubt scorbutic. The gangrene commenced almost simultaneously both upon his wrist and his ankle, as a small pimple, from which point it rapidly spread.

DISLOCATION OF THE SECOND PHALANX OF THE GREAT TOE.

By J. M. CLEAVELAND, M.D.,

OF THE STATE LUNATIC ASYLUM, UTICA, N. Y.

Carsten Holthouse observes that "dislocations of the second row of phalanges (toes) are so rare that Malgaigne could find but two examples of the accident on record; one was a compound dislocation affecting the great toe, and the other the third toe." See *Holmes's System of Surgery*, p. 672, vol. ii.

I give you the following case, not knowing whether the silence of the records referred to be owing to the rarity of the accident, or to its insignificance.

J. C., aged 38, a stout muscular man, a patient in the State Lunatic Asylum at Utica, being teazed by a fellow-patient, ran after the latter, and dealt him a kick with his right foot, on which he wore a slipper. He suffered neither pain nor inconvenience in walking until six hours afterwards; when the great toe of the right foot became swollen, red, and acutely painful. On examination the great toe was found to be shortened, and the second phalanx dislocated backwards, and the extremity of the toe inclined upwards and slightly towards the second toe. Under iced water-dressings for two or three days the pain and swelling so far subsided, that reduction was easily accomplished.

CASE OF IMPERFORATE ANUS;

THE BOWEL TERMINATING IN THE URETHRA.

By H. P. STEARNS, Surgeon U.S.V.,

IN CHARGE OF U.S. GENERAL HOSPITAL OF PADUCAH, KY.

I was asked, September 20th, by one Mr. Miles, to visit his child, and, if possible, relieve it by an operation, as there was no "*outlet*," as he expressed it, for the contents of the bowel.

I found the child, a well formed male, of about eight pounds weight, perfect, with the exception of the anus. The bowels were somewhat distended, and the child appeared to be in some pain, and was apparently making efforts to discharge the contents of the intestine. Chloroform was administered by my friend, Dr. L. S. Horton, and I proceeded to dissect through the integument or semi-mucous membrane, and carried the dissection about one inch and a half, finding no rectum or bowel. By introducing the finger I was able to distinctly feel the movement of the contents of the abdomen at each inspiration, my finger resting upon what I judged to be the peritoneum. As nothing could be felt indicating the location of the bowel, I came to the conclusion that it probably terminated in a *cul-de-sac* in some portion of the colon. If this should not prove to be the case, I thought it possible that, as it became more distended, it could be felt by the finger, and, consequently, introducing a tent, I left, promising to see the child again the next day.

Upon my next view I observed something about the penis which appeared to be fæcal matter, and the attendant said that the child had passed fæcal matter from the penis with much effort. No bowel could be felt through the dissection which I had made, and I consequently left the result to nature, supposing the child would only survive a few hours. It died the next day at eleven o'clock A.M., having lived three days, and, as the attendant informed me, had three distinct fæcal discharges by the urethra. Six hours after death I made an examination, and found all parts normal except that the bowel terminated in the urethra, entering it just in front of the prostate gland. I should add that the genitals were much larger than is usual, being of the size of those of an ordinary child eight years of age.

Paducah, Ky., Sept. 30. 1863.

Progress of Medical Science.

PREPARED BY E. H. JANES, M.D.

PREVENTION AND CURE OF PUERPERAL INFLAMMATIONS.

While there exists a greater or less mortality in childbed, the subject of its causes, prevention, and cure, cannot be too faithfully studied by the medical man. An elaborate paper on this subject, by Dr. Robert Johns, is published in the last number of the *Dublin Quarterly Journal of Medical Science*, founded upon many years' experience and observation, in which we are told that in by far the greater majority of instances, especially in private practice, *post partum* inflammation is either induced or overlooked by the medical attendant, from want of practical knowledge or attention on his part, or from neglect or violation of his directions by the nurse, by the patient, or her friends. In addition to his own observation, he is supported in this remark by such authority as Drs. Denman, John Clarke, and White. Without presuming to discuss the pathology, or to recommend any new specific for the treatment of the disease, the object of the paper is to point out some of the principal causes, and show how they may be avoided, or, failing to prevent the disease, to point out the best means for removing it. He views prevention in a twofold light: in one, our object being to avoid or remove predisposing causes; and in the other, when these causes have obtained, to counteract their baneful influence by adopting that treatment most likely to ward off the anticipated danger; and this he believes is best effected by adopting as a prophylactic—though less actively—the most powerful of those means successfully employed for cure of the disease. Should this fail, we have the advantage of having commenced treatment early in a disease which runs its course so rapidly. Though the causes of post-partum inflammation are numerous, the following are classed among the most frequent and most powerfully predisposing:—1. *Impaired health during pregnancy.* This we should remedy as far as possible by insisting upon the use of proper kinds of food, and regularity in the mode of living towards the end of pregnancy, by paying proper attention to the bowels, and by all means prevent an accumulation of fæces. By seeing the patient occasionally, much may be done towards keeping her in good health. 2. *Want of cleanliness and ventilation. Hospital influence.* The remedy for this is obvious. The only means of arresting the disease when prevailing in a public institution is in shutting up, cleansing, painting, and thoroughly ventilating. As an example, he mentions the report of the Royal Maternité Charity of London for 1861, in which year 4,110 women were delivered, and 11 died, not one of whom had puerperal fever, while during the same period this disease largely embittered the charity of the London lying-in hospitals. 3. *Contagion. Epidemics.* This part of the subject is not confined to epidemics of puerperal fever and its kindred disease, erysipelas; but typhus, scarlatina, small-pox, physicians engaged in anatomical pursuits, or post-mortem examinations, all furnish abundant source of infection for the propagation of this disease. In support of this, he cites what occurred some years since at the Vienna Lying-in Hospital, where it was the habit to intrust one portion of the patients to the care of male students, whilst the other portion was attended by females. It soon became manifest that the mortality amongst the former class was far greater than in the latter, which, on inquiry, was found to have resulted from the fact of the male students being engaged daily in anatomical pursuits. They were then superseded by females, after which the discrepancy completely disappeared, and an order was issued, that, for the future, no student so engaged would be permitted to attend. He is so strongly impressed with the truth of this observation, that he invariably refuses either to make or assist at necroscopic examinations, and considers it highly reprehensible for any person so engaged, or in the attendance of typhus fever, erysipelas, or puerperal fever in hospitals, or who is resident therein at epidemical periods, to practise midwifery. Though the disease be epidemic in its origin, we often have sufficient precursory indications to lead us to fear the approach of an epidemic, and thus enable us to make use of such prophylactic measures as are within our power. These indications are, slow recoveries, without being able satisfactorily to account for them, deficiency of pains, irregular and spasmodic contractions, rigidity of the os, and other causes of prolonged labor, which, of itself, is one great source of the disease. This is supported by the evidence of Drs. Collins, Joseph Clarke, and Van Franke. 4. *Distress of mind from seduction and such like; anxiety, and excitement caused by visitors.* The connexion between mind and body is nowhere better exemplified than in the puerperal state; and it is a true remark that seduced females are particularly obnoxious to puerperal fever, which is with them very fatal. Newspaper reports of deaths from this disease, and many stories continually rung in the ears of the poor victim by the anxious but meddlesome friends, all have their mischievous tendency, and should, as far as possible, be prohibited; also, the too early admission of visitors into the patient's room, while still suffering from that irritation of the system occasioned by the violent efforts of labor. 5. *Errors in diet, and use of stimulants.* From various authorities consulted, as well as from actual experience, it is laid down as a rule that animal food is improper, and ought not to be allowed till after the secretion of milk has been well established, the attendant fever subsided, and the pulse has come down to its natural standard. Stimulants employed during labor induce hæmorrhage; and if taken too soon after its completion, induce puerperal inflammation. 6. *Hæmorrhage; introduction of the hand for version, or retained placenta; portion of secundines retained, or clots putrefied in the uterus.* 7. *Drawing the breast by artificial means too soon after delivery, or repelling the milk too suddenly by cold applications of vinegar, etc.* 8. *Exposure to cold, too early rising, or going out too soon after delivery.* We cannot too carefully guard our patient from exposure to cold, either from too light clothing, or the too abrupt removal of the binder, or from going out for a walk or drive, for at least a month after delivery. This must be apparent to all when we bear in mind that the womb, which before impregnation measured two and a half inches, and weighed about an ounce and a half, and which had at the termination of utero-gestation increased to twelve inches, and attained to the weight of several pounds, could not return to its pristine condition in a shorter period of time. With a view to avoid inflammation, as well as the foundation for future mischief, it is deemed paramount to keep the patient in a recumbent posture so long as we can feel the uterus enlarged above the pubes. 9. *Puerperal convulsions, actual or threatened.* Collins and Denman both allude to this fact, and Dr. Johns has elsewhere expressed the same opinion, which his subsequent experience has proved to be correct. 10. *Uterine disease.* 11. *Inhalation of Chloroform during labor.* He entertains no doubt that this strongly predisposes to puerperal inflammation, producing the disease either directly by poisoning the blood or otherwise, or indirectly by inducing hæmorrhage, or chest affections, already stated to be promoters of the malady. He has already written a paper on this subject, published in a previous number of the Journal. If we are not successful in avoiding or removing these causes, our next duty is to employ, as a prophylactic, such remedies as have been most successful in treating the disease, regulating the administration by the number and force of existing influences. For this purpose mercury is recommended to be employed in a mild way, commencing immediately after, and in some instances before delivery, and continuing its use until the milk has been secreted. Where the patient has suffered much in the removal of the after-birth, Dr. Collins recommends the use of calomel and ipecacuanha, to be commenced immediately after delivery, so as to be beforehand with inflammatory attack. It is highly important that the treatment should be commenced early, as a few hours' delay may often be the cause of a fatal result; hence the necessity of watching narrowly the condition of the patient, so as to be able to detect the slightest inflammatory symptom, and of seeing the patient instantly if sent for under circumstances that lead us to suspect the slightest danger. The treatment should not only be prompt but thorough. The abstraction of blood is generally requisite, though venesection, owing to the asthenic nature of the disease, is not so often resorted to as formerly. The repeated application of leeches answers better, and does not weaken the patient. Mercury is regarded as our sheet-anchor, and should be given in very bad cases to an extent nothing short of salivation. Owing to the diarrhœa that sometimes accompanies the administration of mercury, Dr. Johns is in the habit of giving it in combination with opium and bismuth, giving the mercury in small doses by the mouth, together with its endermic use. When used in this manner, he has never seen the bowel complaint increased, but, on the contrary, arrested. He knows of no well authenticated case terminating fatally where there were distinct evidences of the system having been affected by mercury. As adjuncts he employs stupes, turpentine epithems, turpentine internally if much flatulence exists, linseed-meal poultices, hot dry bran, and blisters, in some instances dressed with mercurial ointment. Where mercury is inadmissible, or when it has been inefficiently used or neglected, secondary affections are likely to supervene, when quinine with opium, bark with ammonia, chlorate of potash, sesquichloride of iron, broths, and brandy, are indicated.

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SYPHILIS IN THE ENGLISH ARMY.—From the Army Statistical Reports it appears that the annual admissions into hospital from venereal diseases amount to 206 in every 1000 Cavalry soldiers, 250 in the same number of Foot Guards, and 277 in every 1000 Infantry of the Line. The average proportion for the Army at home is 267 per 1000, or more than one-fourth of the whole number. It is calculated that on the lowest average each man is fifteen days under treatment. Thus 688 men out of the home force are always in hospital from this cause alone—a number equal, or nearly so, to the strength of a regiment on the home establishment; and the money loss to the State is calculated at nearly £14,500 a year. The further loss from subsequent disease and invaliding, and the injury to the State from the life-long deterioration of the individual and from the hereditary curses of transformed syphilis and scrofula conveyed to future generations, are beyond calculation. In India the case appears worse than in England. The proportion of venereal cases constantly in hospital is usually from 20 to 25 per cent. of the total sick. At some of the larger stations it much exceeds this. At Bangalore and Roorkee the proportion at the time the report was made was 50 per cent.; at Dinapore it was as high as 53 per cent.; and Dr. Maclean testified that a few years ago in the 1st Madras Fusiliers the amount of syphilis was equivalent to the withdrawal from duty of one-fourth of a company daily.—*Lancet.*

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, April 22, 1863.

DR. D. S. CONANT, PRESIDENT, IN THE CHAIR.

OVARIOTOMY.

Dr. Finnell exhibited a mass of ovarian disease removed by ovariotomy from a patient twenty-six years of age. She first came under the notice of Dr. Finnell a year before. The abdominal swelling at that time was very great, and the only relief that could be obtained was by tapping. Four or five gallons were drawn off at the first operation, and about three gallons at the second. At her very urgent request the operation for ovariotomy was performed, notwithstanding the fact that she was very much run down.

The incision was made a little to the right of the median line, four or five inches in length, and a little below the umbilicus. There were some slight attachments to the omentum, which, however, were very easily separated. The pedicle was about one inch in thickness, and about three inches in length; it was drawn out as usual, and secured with a silver wire suture. The tumor weighed seven pounds. On the morning of the second day after the operation the patient commenced vomiting, and experienced considerable pain and tenderness of the abdomen. On the fifth day peritonitis was fully developed, and she died. There was found at the time of the operation, floating around in the abdominal cavity, a mass of false membrane, which evidently was the result of previous inflammations.

Dr. Conant thought it good practice, where the pedicle was short, to bring out the ligature through the vagina by means of a curved trocar. The opening thus made would be large enough to allow the escape of fluids, but too small to admit air.

Dr. Prince was of the opinion that the ecraseur would be serviceable in cases where the pedicle was short.

Dr. Finnell remarked, that he would be afraid to return the pedicle, inasmuch as, when reaction came on, the danger of hæmorrhage would be too great.

Dr. Sands had read of a case reported in one of the English journals where a great deal of violence had been resorted to in order to break up old adhesions, and yet the patient made a good recovery. This was simply owing to the fact that the peritoneum, in consequence of numerous previous attacks of inflammation, had become so altered as not to be susceptible of extensive inflammation. The same analogy holds good in long standing disease of the pleura and of the knee-joint.

OPERATION OF TREPHINING.

Dr. Conant presented a disc of bone removed by trephining from the skull of a boy, with the following history. The patient had been tending the launch of a gunboat, when a hawser, attached to the capstan, broke, throwing him violently against a spar. He struck head first, and remained insensible for three-quarters of an hour, but at the end of that time he became rational, and remained so for three days. On the right side of his head, near the parietal bos, was noticed a soft tumor, but no depression could be made out. On the fourth day there were manifest some typhoid symptoms, and a brisk cathartic was accordingly given. On the sixth day there was noticed a soft tumor on the opposite side of the head, with edges so marked that the physician who saw the case was inclined to think that there was depression of bone. On the morning of the seventh day there was convulsion of the right side, followed by paralysis of the right arm and right side of the neck. There was also a slight convulsion of the right leg. The pupils were very much dilated. On the morning of the twenty-seventh day after the injury the patient had another convulsion, and Dr. Conant was sent for. The patient was etherized, and the head very carefully examined. On the right side of the head no depression was discovered, but on the left side there seemed to be a slight yielding on pressure. It was determined to cut down in this situation. On baring the bone a fissure was discovered, with blood oozing from it, when it was concluded that a clot which had been very slowly forming existed underneath. A button of bone was accordingly removed, disclosing a blood clot, which, on being removed, it was found that the patient could move his arm perfectly well, and his intellect began to get clear. On the twelfth day he was able to be up and dressed. The pupils are still a little dilated.

REMOVAL OF ENCEPHALOID DISEASE OF THROAT.

Dr. Conant also referred to a case of operation for the removal of encephaloid disease of the throat. The patient was sixty-seven years of age, and the disease had only made its appearance five months previous, but in that time its rapidity of growth was such as to fill up almost the entire faucial orifice. Dr. Conant at first took off about two-thirds of the mass by means of the ecraseur, and at the end of ten days removed the remaining portion. There was a considerable amount of hæmorrhage, which, however, was checked by the application of the persulphate of iron. The patient made a good recovery. On examination of the mass after removal, the starting point of the disease was found in the mucous membrane immediately surrounding the tonsil.

The Society then adjourned.

American Medical Times.

SATURDAY, OCTOBER 17, 1863.

PRESENT REMUNERATION FOR PROFESSIONAL SERVICES.

The subject of remuneration for professional services has always interested the mind of the medical public, and notwithstanding so many discussions have been held upon the question it has hardly yet become threadbare; in fact, it is not likely ever to lose its claim for consideration as long as medicine is practised for a livelihood. We do not, however, wish to discuss the question in all its bearings, but would merely present some thoughts having reference to the present times. Speculators in gold, job stock brokers, contractors, and the like, have so crippled the confidence in the money market that as a consequence provisions, and all the other necessaries of life, have risen to surprisingly high rates, so that the actual cost of living is now nearly double what it was nearly two years ago. Every component part of the community feels the burden of this great advance on the price of goods, and the redress is sought in a corresponding demand for an increase in wages. We already have seen that among the lower classes, where the burden is necessarily soonest felt, "strikes" have been so common that almost every artisan can now lay claim to his just dues. It is but proper that every laborer and business man should seek to protect himself by an increase upon his rates; and the physician, viewed in the light of one who is expected to earn his living by the practice of his profession, should not be behindhand in asserting his claims for justice. We maintain that some advance in the present rate of charges should be agreed upon by the profession as a body, in order that they may protect themselves against such ruinously high prices. To those gentlemen who have large incomes this may not be so seriously felt; but to the young practitioner, whose yearly receipts heretofore have been barely sufficient to maintain him in the style in which he should live, it becomes an absolute necessity, else he renders himself liable to get into debt, or may perchance be forced to deny himself some of the necessaries of life. The profession should look to its interests, and it can only do so in the matter by acting as a unit.

In adjusting what we consider our claims upon the community, we must not render ourselves liable to run into another extreme, by demanding anything more than what is our due. The evils of exorbitant charging are not only great, so far as they will prejudice the community against us, but as a body we ourselves would be seriously damaged, inasmuch as it would tempt us to lose sight of our sacred mission in the love for gain, thus degrading our profession to the level of the merest trade. The practitioner of medicine establishes for himself a certain *quid pro quo* for the treatment of a disease; but he is not prepared to admit that his services are only worth just so much, that his advice to the poor sufferer *can* be paid for in mere dollars and cents, but as a domestic economist he is entitled to a certain income to supply his wants, and by virtue of that alone does he feel, as a physician, that he is entitled to a fee.

With this view of the question, there is no need for any false delicacy in the matter, and we should not be at all backward in establishing such pecuniary relations to the public as we are really entitled to. As men of science and philanthropists, we look after the interests of the community in a manner which lays them under infinite obligations to us, and the least that they can do is to afford us a decent means of livelihood.

We think that the subject is one which should be agitated in professional circles, in order that some concerted action may be the result, and some uniform tariff of prices be at once determined upon.

THE WEEK.

At the recent International Congress held at Vienna, the health of armies and of recruits was a subject of discussion. The following allusion to the action taken, is from a newspaper correspondent:—

> The fourth section reports on the health of the army, particularly of the recruits. Extreme opinions prevail about the sanitary condition of the army. The elaborate reports of Drissangel and Prof. Virchow have been an excellent basis for the labors of this section. The statistics of the sanitary condition of recruits is a most difficult subject. Their healthy condition represents a valuable capital. The section has come to the following resolutions:—
>
> 1. The Congress sees an excellent opportunity to obtain through recruits exact information of the sanitary condition of a large portion of the male population.
>
> 2. It is the wish of the section that all recruits be examined and their sanitary condition be investigated, not excepting those who are deficient in stature nor those altogether unfit.
>
> 3. Principal points to be inquired into.
>
> (*a*) Place of nativity and occupation.
>
> (*b*) Stature, weight, circumference, measure of breast. (The measurement to be taken in a quite uniform manner.)
>
> (*c*) Statement of the morbid condition which caused unfitness for service. Exact tables, such as given in the programme of the preparatory committee (too voluminous to be reproduced here), should be prepared. The Congress recommends urgently to the governments the acceptance of these resolutions. The programme contains most learned essays by Professor Virchow on this subject, which are recommended by the fourth section for the information and consideration of governments.

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We have several times alluded to the hospital cars recently constructed, at the suggestion of the Sanitary Commission. To Dr. Elisha Harris is due the credit of devising them, and we are happy to know that they serve an admirable purpose. They are already to be placed on several of the most important railroads. A contemporary thus describes what it designates as the Harris hospital car:—

> "The length is 41 1-2 feet, and the width 8 feet 7 inches. The car will accommodate thirty-six patients, with the requisite number of attendants, usually three or four—surgeon, steward, and two 'contrabands;' the patients being divided off as follows:—Twenty-four in beds, four on sofa, and six—the more convalescent—in easy chairs. Some idea may be formed of the thoughtfulness of Dr. Elisha Harris, of New York, the originator of these cars, when we state that in addition to all the mechanical comforts supplied in the build of the car, the following partial list of articles of the first quality is also provided: —24 stretchers, 31 pillows, 24 counterpanes, 24 pairs of socks, 30 pairs of slippers, 50 towels, 10 pair surgeon-splints, 15 gowns, 1 roll of lint, 25 handkerchiefs, cooking apparatus, case of medicine, beef-stock, coffee, milk, cups, pitchers, knives, tin plates, bandages, rubber air pillows, rubber pails and blankets, utensils for cleansing, canteens, fans, and jellies—making in all a complete and portable hospital. The facilities for ventilating the car cannot be surpassed for simplicity and efficacy. A free and pure current of air is constantly supplied, smoke and dust being ingeniously avoided. Every department, in fact, is so complete, that a simple description cannot do justice to the ingenuity displayed in each."

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While the citizens of New York have received with private and civic ovations the officers of the Russian fleet now in our harbor, the medical profession has extended to the surgeons of the fleet a cordial greeting. In another column we give the address of welcome of Dr. Buck, on the part of the Academy, and the reply of a member of the Russian staff. Four members of the staff visited the Academy of Medicine at its last meeting, and were warmly welcomed by the President, Dr. Anderson, after which the meeting adjourned to that gentleman's house, where a social reunion was held.

Correspondence.

WOUNDS OF THE CAVITIES, VISCERA, AND BRAIN.

[Third letter of Dr. A. H. Hoff, Surg. U.S.V., to Prof. March, of Brooklyn, N. Y.]

Dear Sir:—I have expressed to you very freely my ideas in reference to resections, support of fractures, etc., etc., and I shall devote this letter to wounds of the cavities, viscera, and brain. Wounds of the chest are not as common as one would suppose. It is a singular fact, that the vast majority of wounds are of the extremities. However, it has been my fortune to have had placed in my charge quite a number wounded in the chest, and most of these several days after receiving the injury. The history of these cases, so far, does not endorse the determined necessity of the peculiar treatment presented heretofore by many of our military surgeons. I find here, as well as everywhere, that we all are inclined to ride our hobby, some insisting upon one thing, and some upon another. But what has surprised me most, is the fact that in the midst of a multitude of opinions our patients recover with but little of our interference. I have not seen, so far, a single case of internal hæmorrhage from a gunshot wound penetrating any of the cavities, supposing the reason to be that death invariably ensues within a short time after the wound is received. Those cases that have come under my notice, have, so far, simply required care as to *position*, and a moderate degree of treatment, having a tendency to compose the nervous system, and hold in check inflammatory action.

Hearing the air rushing out through an aperture in a man's back, and through another in front on the opposite side, at every expiration, would incline one to make a very unfavorable prognosis; but to have the same man shake you by the hand six months after, with his musket slung across his shoulder, well and hearty, would lead you to ask how can this be, and what has been done to accomplish it. On inquiry, you find that first one hole closed up; then, after a little, it produced no inconvenience to stop up the other. The expectoration, which was somewhat troublesome and streaked with blood, continued for two or three days; then more oppression was felt, some twinging pains, respiration after reaching a certain point was painful, but the patient could get along without breathing so long; it did not seem necessary to support life that a full inspiration must be taken, and it could not be done, because it hurt; felt better in a semi-recumbent position, but found lying on the side, "scoop fashion," did just as well, and enabled him to sleep and let all the matter run out; had a first-rate appetite, but had to be careful not to fill his belly too full, as he could not breathe so well; washing him off with cold water now and then, first along with a patch spread on his breast, kept cool, felt first-rate, made him breathe easier, and then, keeping perfectly quiet, not talking any, and having folks keep away from him, saved his life. "Didn't take much doctor stuff; a little stuff now and then to make him sleep, and once, he believed, a little physic to open him." I have outlined this conversation for the purpose of pleasantly demonstrating what made a man so severely wounded feel comfortable, gleaning from it the following indications:—1st, Keep the orifice open. 2d, Be particular as to position, consulting the patient's feelings carefully, as he is the best judge. 3d, Keep the chest cool. 4th, Give free exit to all discharge. 5th, Quiet all irritation by keeping the patient perfectly quiet, giving anodynes, but with great care; be cautious about diet, more especially quantity, and meet with decision any untoward complication your watchfulness may discover. Don't think, because the wound is dreadful, the remedies must be dreadful with which you attack it. On looking over what I have written, I feel inclined to think you will laugh at me, but you know my hobby is to add the sufferer's opinion to my own thinking, thereby better to get at the indications; for he feels the pain, and I judge of the cause; he knows when it is relieved, I find out the reason. Nature cures, I do the best to assist. Allow me here to make this remark; on the battle-field it would be a troublesome matter to carry out the immediate treatment recommended for gunshot wounds of the chest accompanied with severe hæmorrhage. I hope it will never be my fortune to receive one, as death would be my certain doom.—I find I have consumed all my time. The army is in front of Vicksburg; what is to be done, I have not been informed, but I am happy to say that the medical department out here is in first-rate condition; everything in readiness, let come what will.

U.S. Hospital Steamer D. A. January,
Young's Point, La., March 29, 1863.

MINIÉ RIFLE BALL ENTERING THE BELLY AND ESCAPING BY THE RECTUM.

[To the Editor of the American Medical Times.]

Sir:—In one of the late numbers of your Journal a correspondent has reported two cases of the escape of balls by the rectum. I wish to report a third.

On the twenty-ninth of March, 1863, I saw, in Hospital No. 8, at Louisville, Ky., Corporal John I. English, of the 5th Indiana Battery, who was wounded at Murfreesboro, on the thirty-first of December, 1862, by a conical ball, which entered just below and in front of the anterior superior spinous process of the ilium, on the left side. The ball escaped from the rectum on the fortieth day.

When I saw Corporal English he was in bed: the wound in front had closed, but matter continued to discharge by the rectum. His bowels were regular; but he was obliged to urinate often, and urination was attended with some pain. His health was steadily improving, and there was but little reason to doubt his final and complete recovery. The ball, which he showed me, was a little battered.

Very truly yours,
Frank H. Hamilton.

New York.

Army Medical Intelligence.

(CIRCULAR NO. 19.)

Surgeon-General's Office,
Washington, D.C., Sept. 28, 1863.

The assignment of Officers in command of Companies of the Invalid Corps to General Hospitals, is for the purpose of increasing the efficiency of the Hospitals, and is a part of the hospital organization, under the senior Medical Officer.

They are, while on that duty, a portion of the Commissioned Staff of the Hospital, and are entitled to the same allowance of quarters, fuel, etc., within the Hospital, when at all practicable, as Medical Officers of similar rank.

It is confidently expected that much benefit will be derived from the provisions of General Orders No. 212, current series, and that Surgeons in charge of General Hospitals will endeavor to render the position of these Officers such that there will be entire harmony and concord of action in the performance of their respective duties.

By order:

C. H. Crane,
Surg. U.S.A.

(CIRCULAR NO. 20.)

Surgeon-General's Office,
Washington City, Sept. 29, 1863.

Medical Directors, in cities where there are several General Hospitals, will designate one in each city at which enlisted men, requiring Trusses, will report themselves to the Surgeon in charge, to be measured for and fitted with the proper instruments. Medical Purveyors will cause to be made, and furnish, Trusses corresponding in measure and description with the requisition to be made in each case, in lieu of the usual issue, which will be discontinued to all General Hospitals where this arrangement can be carried into effect.

By order:

C. H. Crane,
Surg. U.S.A.

ORDERS, CHANGES, &c.

Surgeon William S. King, U.S.A., has been relieved from duty as Medical Director, Department of the Susquehanna, and ordered to proceed to Lexington, Ky., and report in person to Major-General Burnside, commanding Department of the Ohio, for duty as Medical Director of that Department.

Surgeon Gideon S. Palmer, U.S.V., on duty at Chambersburg, Pa., has been ordered to report to Major-General Meade, for duty as Medical Director, 11th Army Corps.

Surgeon C. F. H. Campbell, U.S.V., on being relieved as Medical Director, 11th Army Corps, will report to the Medical Director, Department of the Susquehanna, for duty at Chambersburg, Pa.

In accordance with the findings of a military commission, convened by virtue of Special Orders No. 386, Headquarters District of Memphis, and by direction of the President, Assistant-Surgeon W. S. Bell, 43d Ohio Vols., has been dismissed the service of the United States for absence without leave.

The leave of absence heretofore granted Surgeon R. K. Smith, U.S.V., from the Headquarters Department of the Gulf, has been extended twenty days.

Edward Russell, late Surgeon 4th Louisiana Vols., dismissed as Assistant-Surgeon 26th Massachusetts Vols., by Special Orders No. 233, current series, has been restored to his regiment with pay from the date of rejoining it for duty, on condition that he shall refund to the Pay Department an over-payment of $225.16, and provided the vacancy has not been filled, evidence of which must be obtained from the Governor or appointing authority.

The following named Medical Officers have been assigned to duty with the Army of the Potomac, to report in person without delay to Surgeon Jonathan Letterman, U.S.A., Medical Director of that Army.

Assistant-Surgeon E. J. Marsh, U.S.A., now on duty in Washington, D. C.

Assistant-Surgeon C. K. Winne, U.S.A., now on duty at Pittsburgh, Pa., Department of the Monongahela.

Assistant-Surgeon John Bell, U.S.A., now on sick leave, at the expiration of his leave.

Assistant-Surgeon Van Buren Hubbard, U.S.A., now in charge of U.S. General Hospital, Filbert street, Philadelphia, Pa.

Assistant-Surgeon Edward Brooks, U.S.A., now on duty in Baltimore, Md.

So much of Special Orders No. 408, September 17, 1863, from this Office, as directed Assistant-Surgeon W. C. Daniels, U.S.V., to report in person without delay to Major-General Grant, U.S.V., commanding Department of the Tennessee, is hereby revoked, and Surgeon Daniels will report at once to Major-General Burnside, U.S.V., commanding Department of the Ohio, for duty.

So much of Special Orders No. 294, July 3, 1863, as directed Surgeon Charles McCormick, U.S.A., to report in person to Brigadier-General Kelly, U.S.V., commanding Department of Western Virginia, for duty as Medical Director, has been revoked, and Surgeon McCormick will proceed without delay to Wilmington, Del., and relieve Surgeon John Campbell, U.S.A., as a member of the Retiring Board, convened by Special Orders No. 307, July 11, 1863, now in session at that place.

Surgeon Campbell on being relieved to proceed to the Headquarters Department of the Susquehanna, and report to Major-General Couch commanding, for duty as Medical Director.

By direction of the President, and upon the recommendation of the Board of Examiners, convened by Special Orders No. 294, July 3, 1863, Surgeon W. H. White, U.S.V., has been honorably discharged the service of the United States on account of physical disability, to date September 26, 1863.

Leave of absence has been granted to the following Medical Officers:—

Acting Assistant-Surgeon G. M. Paullin, U.S.A., for twelve days.

Assistant-Surgeon R. R. Wiestling, 1st District of Columbia Cavalry, for fifteen days.

Surgeon J. S. Hildreth, U.S.V., Desmarres Hospital, Washington, D. C., for fifteen days.

Surgeon James Bryan, U.S.V., is on sick leave at Philadelphia, Pa.

Surgeon John A. Lidell, U.S.V., has been granted twenty days' leave, on account of sickness.

Assistant-Surgeon W. C. Spencer, U.S.A., has been relieved as Medical Purveyor, Department of the Gulf, at New Orleans, La.

The following assignment of Medical Inspectors is hereby made:—

Lieutenant-Colonel L. P. Vollum, U.S.A., now stationed in Washington, D. C., to report in person to Major-General Rosecrans, commanding Department of the Cumberland, as Medical Inspector of that Department, and by letter to Assistant Surgeon-General Wood at St. Louis. Station, Nashville.

Lieutenant-Colonel Peter Pineo, U.S.A., now at Boston, Mass., awaiting orders, to report for duty as Medical Inspector to Major-General Gilmore, commanding Department of the South. Station, Hilton Head, S. C.

Lieutenant-Colonel Augustus C. Hamlin, U.S.A., now on duty in the Department of the South, to repair to this city, and report in person to the Medical Inspector-General, U.S.A., as Medical Inspector of the Department of Washington.

Lieutenant-Colonel John Wilson, U.S.A., upon completion of special duty in Medical Inspector-General's Office, to report to Major-General Meade, commanding Army of the Potomac, as Medical Inspector of that Army. Station, Washington, D. C.

Lieutenant-Colonel N. S. Townsend, U.S.A., now on leave of absence, to report at the expiration of his leave to Assistant Surgeon-General R. C. Wood, at St. Louis, for assignment.

Lieutenant-Colonel George W. Stipp, U.S.A., now on leave of absence, to report at the expiration of his leave to Major-General Banks commanding Department of the Gulf, for duty as Medical Inspector of that Department. Station, New Orleans.

Lieutenant-Colonel John L. Le Conte, U.S.V., now on duty as Medical Inspector in the Department of the Missouri, to report to Major-General Couch, commanding Department of the Susquehanna, for duty as Medical Inspector of that Department. Station, Philadelphia, Pa.

The leave of absence granted Surgeon W. S. Forbes, U.S.V., in Special Orders 217, Headquarters Department of the Gulf, has been extended twenty days.

STATISTICS OF THE CAUSES OF EXEMPTION.—Provost Marshal-General Fry has issued a circular directing that immediately upon the completion of the draft in any district, the Surgeon of the Board of Enrolment therein will compile, and forward to the Provost Marshal-General's Office, the statistics of the causes of exemption, on account of physical disability, from such draft in his district. The report will show the whole number of men drafted in the district, with an alphabetical list of the several kinds of disability, and the number rejected for each, and will be accompanied by a detailed statement of such other facts as may be of scientific importance to the medical profession of the army.

Dr. Roger W. Pease (Surgeon New York Vols.), has been appointed Assistant-Surgeon U.S.V., to date October 2, 1863.

By direction of the President, Assistant-Surgeon L. H. Pease, 10th Connecticut Vols., has been dismissed the service of the United States.

Lieutenant-Colonel J. M. Cuyler, Medical Inspector U.S.A., has been directed to make a close inspection of the command in and near Norfolk and Portsmouth, Va., and the United States General Hospital at Old Point Comfort.

Surgeon R. B. Bontecou, U.S.V., has been relieved from duty in the South, and will report in person without delay to the Medical Director, Department of Washington, for duty in charge of the Harewood General Hospital.

Surgeon A. T. Augusta, 7th U.S. colored troops, is hereby relieved from duty at the Contraband Camp near this city, and will report immediately to Surgeon Josiah Simpson, U.S.A., Medical Director, Baltimore, Md., for duty with his regiment.

A Board of Medical Officers, to consist of Surgeons J. J. B. Wright and E. H. Abadie, U.S.A., and Assistant-Surgeon J. H. Bill, U.S.A., will convene in New York city on the fifteenth day of October, 1863, or as soon thereafter as practicable, for the examination of candidates for the appointment of Assistant-Surgeons in the U.S.A., and of any Assistant-Surgeons for promotion who may be brought before it.

Assistant-Surgeon Wallace D. Martin, 62d Pennsylvania Vols. has been discharged the service of the United States on account of physical disability, and for absence without proper authority, as reported on the rolls of the regiment.

Permission to delay reporting to the Medical Director, Department of the Gulf (as directed by Special Orders 408, September 11, 1863, from the War Department), for fifteen days, is hereby granted Surgeon Thomas B. Reed, U.S.V.

Upon the report of a Board, organized by virtue of Special Field Orders No. 205, July 27, 1863, Headquarters Department of the Cumberland, Assistant-Surgeon Mordecai Brooks, 82d Indiana Vols., has been, by direction of the President, discharged the service of the United States for incompetency.

The leave of absence granted Surgeon Lincoln R. Stone, 54th Massachusetts Vols., in Special Orders No. 541, September 23, 1863, from Headquarters Department of the South, to enable him to appear before the Army Medical Board, now in session at Washington, for the examination of candidates for appointment of Surgeons and Assistant-Surgeons of Volunteers, has been extended ten days.

So much of Special Orders No. 433, September 27, 1863, from the Adjutant-General's Office, as directed Surgeon G. S. Palmer, U.S.V., to report to the Medical Director, Army of the Potomac, for duty as Medical Director, 11th Army Corps, is hereby revoked, and Surgeon Palmer will report for temporary duty at Carlisle, Pa., to relieve Surgeon J. J. B. Wright, U.S.A. On the return of Surgeon Wright to his duty at Carlisle, Pa., Surgeon Palmer will report by letter to the Surgeon-General for duty.

Permission to delay ten days en route to his station is granted Surgeon P. H. Humphreys, 58th New York Vols.

The leave of absence, heretofore granted Surgeon R. K. Smith, U.S. Vols., is extended ten days.

Leave of absence has been granted to:—

Surgeon J. M. Allen, 54th Pa. Vols., for fifteen days.

Assistant-Surgeon J. H. Williams, 123d Ohio Vols., for twenty days.

Surgeon Chas. O'Leary, U.S.V., for twenty days.

The following named commissioned officers have been detached from their respective commands, and ordered to report in person to Brigadier-General Wild, U.S.V., at Morris Island, S. C.

Assistant-Surgeon H. H. Mitchell, 29th Massachusetts Vols.

Assistant-Surgeon Arthur H. Cowdry, 7th Massachusetts Vols.

By direction of the President, Surgeon James C. Fisher, U.S.V., is hereby dismissed the service of the United States, for persistent failure in making to the Surgeon-General's Office, monthly reports of station and duties, as required by circular from that office.

Leave of absence has been granted to Assistant-Surgeon H. M. Sprague, U.S.A., for twenty days

Surgeon E. J. Bailey, U.S.A., has been relieved from duty as a member of the Board to retire disabled officers, convened by Special Orders No. 307, July 11, 1863, and now in session at Wilmington, Del., and Surgeon Ebenezer Swift, U.S.A., is detailed as a member of said Board, in his place.

Surgeon W. C. Otterson, U.S.V., has been ordered to report to the Assistant Surgeon-General, at St. Louis, Mo., for hospital duty, as soon as his health will permit.

Surgeon Frederick Seymour, U.S.V., has been ordered to repair to Nashville, Tenn., and settle his accounts and property returns.

Assistant Surgeons Gerhard Saal, H. L. W. Burritt, and Edwin Freeman, U.S.V., have been ordered to report to Surgeon J. E. McDonald, U.S.V., Medical Director 9th Army Corps, Department of the Ohio.

Surgeon F. A. Keffer, U.S.V., has relieved Assistant-Surgeon W. C. Spencer, U.S.A., as Medical Director, Department of the Gulf, at New Orleans, La.

The General Hospitals, Stanley and Foster, at Newbern, N. C., have been consolidated under the charge of Surgeon J. J. De Lamater, U.S.V.

A General Hospital is being established at Madison, Wisc., for the accommodation of Northwestern Volunteers.

Surgeon B. Beust, U.S.V., is on twenty days' leave at Weehawken, N. J.

Surgeon Snelling, U.S.V., has been assigned to the charge of the Chesapeake hospital, Fort Monroe, Va., relieving Surgeon A. E. Stocker, U.S.V., who will report to the Medical Director, Fort Monroe, for duty.

Surgeon C. Cowgill, U.S.V., in addition to his duties as Superintendent of General Hospitals for the District of North Carolina, will assume charge of the Contraband Department of the same District, and also perform the duty of Surgeon-in-Chief to the command of Brigadier-General Palmer.

Surgeon S. S. Schultz, U.S.V., has been transferred from Covington, Ky., to Madison, Ind.

Assistant-Surgeon Francis Greene, U.S.V., is in New York on sick leave from Department of the South.

Assistant Surgeon A. B. Chapin, U.S.V., is sick in quarters at Annapolis Junction, Md.

The following officers are hereby honorably discharged the service of the United States on account of physical disability, with condition that they shall receive no final payments until they shall have satisfied the Pay Department that they are not indebted to the Government.

Assistant-Surgeon E. F. Spaulding, 7th Wisconsin Vols.
Surgeon Levi Butler, 3d Minnesota Vols.

CIVILITIES TO THE MEDICAL STAFF OF THE IMPERIAL RUSSIAN ATLANTIC SQUADRON.

A DEPUTATION of the New York Academy of Medicine visited the flag-ship of the Russian squadron in our harbor, on Monday the 5th inst., and was most cordially received by the whole medical staff, assembled by previous appointment. After mutual greetings the company proceeded to the Admiral's cabin, where refreshments were provided. The Chairman of the deputation made a brief address in French to the Staff, welcoming them to our city in the name of the Academy, inviting them to be present at its regular meetings during their stay among us, and tendering such personal services as might render their visit agreeable and useful. A response was made in the same language by one of the Staff, heartily reciprocating the fraternal sentiments expressed by the deputation. An hour was then most agreeably spent in conversation and the interchange of mutual good wishes; another member of the Staff also addressed the deputation in English, reiterating the fraternal feelings which all present shared in. After being shown through the ship, and admiring the completeness of her equipment, and the admirable order everywhere conspicuous, the deputation took their leave, highly gratified with their visit.

The deputation, consisting of Drs. Buck, Post, and G. A. Peters, was accompanied by the following members of the Academy: Drs. Delafield, Bulkley, Detmold, Hubbard, Geo. T. Elliot, Joel Foster, Underhill, Noyes, and Bell of Brooklyn.

DR. BUCK made the following address:—

GENTLEMEN AND HONORED COLLEAGUES OF THE MEDICAL CORPS OF THE IMPERIAL RUSSIAN ATLANTIC SQUADRON:—As Delegates of the New York Academy of Medicine we come to welcome you to our city, and express the satisfaction afforded us by this first visit of a Russian squadron to our shores. We avail ourselves of the opportunity to extend to you a fraternal hand. Though separated by the Ocean we are members of the same honorable profession, everywhere laboring in the common cause of humanity and science, and animated by the same motives and aspirations. It affords us pleasure to-day to give expression to that international sympathy which subsists between our respective governments.

GENTLEMEN—The Academy of Medicine has specially charged us to invite you and your colleagues who are expected yet to arrive in our harbor, to be present at its regular meetings during your stay among us. We shall also be happy personally to render you any service that can contribute to make your visit agreeable and useful.

REPLY OF ONE OF THE MEDICAL STAFF.

I am happy, gentlemen, conjointly with my comrades, to greet you on this occasion, and grasp your hands, stretched out with so much friendliness and cordiality towards us, your brethren in science.

What confers an incontestable advantage on our profession, compared with others, is doubtless the absolute cosmopolitism of the Medical art. For, whilst political combinations and other reasons render international relations sometimes friendly, sometimes hostile; whilst misunderstandings provoke bloody conflicts even among fraternal nations, of which we see unhappily sad examples at the present time in your country and our own; I will say further, whilst the fathers of churches make distinctions between their own flocks, Medicine alone never loses its humane and philanthropic character; for there does not exist a country, however little civilized, where medical aid, even to a sworn enemy, is not the first and most sacred of duties.

We feel assured, gentlemen, that it is as much in the name of international sympathy as of science that you have opened your arms to us, your professional brethren; and we flatter ourselves that with the same kindness you will allow us to see your cliniques, your hospitals, and other benevolent institutions, of which your imperial city possesses so great a number.

Thus deriving from your experience and your civilization treasures of science, we shall be able, with the liveliest gratitude, to impart to our colleagues in Russia the fruits of our observation among you, and teach them to appreciate, as we do, your kindness and national genius.

Medical News.

NEW YORK COUNTY MEDICAL SOCIETY.—At the Anniversary Meeting of the Medical Society of the County of New York, held Oct. 5, 1863, the following officers were elected for the ensuing year:—Alf. Underhill, M.D., President; Isaac E. Taylor, M.D., Vice President; Guido Furman, M.D., Recording Secretary; Henry S. Downs, M.D., Corresponding Secretary; S. T. Hubbard, M.D., Treasurer. H. D. Bulkley, M.D., E. R. Peaslee, M.D., Joel Foster, M.D., Jos. K. Merritt, M.D., and D. S. Conant, M.D., Censors; Drs. Jas. Kennedy and Jos. K. Merritt, Delegates to the State Med. Society for three years. The meeting was well attended, it being the largest one since Oct. 12, 1846, which was an adjourned anniversary meeting.

From the Secretary's report we learn that the "comitia minora" had held eleven, and the society nine meetings during the past year, and that twenty-three new members were admitted during the same period, and that no less than eleven members were removed by death during that time.

The hour being late, the election of delegates to the American Medical Association, and the appointment of committees, etc., will be continued at the adjourned anniversary meeting, on the first Monday of November next.

SURGEONS IN THE LIBBY PRISON AT RICHMOND.—The following is a list of the Union surgeons still held as prisoners in the Libby Prison at Richmond, contrary to all the positive and definite agreements hitherto made in regard to these prisoners.—Surgeons W. M. Houston, One Hundred and Twenty-second Ohio, captured June 15; W. F. McCurdy, Eighty-seventh Pennsylvania, June 15; Alston W. Whitney, Thirteenth Massachusetts, June 20; W. A. Rodgers, Third Tennessee, June 19; W. Spencer, Seventy-third Indiana, April 30; J. L. Morgan, Tenth Massachusetts, May 13; C. E. Goldsborough, Fifth Maryland, June 15; Lewis Applegate, One Hundred and Second New York, July 2; T. C. Smith, One Hundred and Sixteenth Ohio, June 15; A. A. Mann, First Rhode Island cavalry, June 18; R. P. McCandless, One Hundred and Tenth Ohio, June 16; A. S. Looker, Sixth Illinois cavalry, May 20; C. T. Simpers, Sixth Maryland, June 15; F. M. Patton, Twelfth Virginia, June 15; O. Nellis, Second Virginia cavalry, July 19; W. W. Myers, United States steamer Georgia, May 14; M. F. Bowen, Twelfth Pennsylvania cavalry, July 15; J. L. Brown, One Hundred and Sixteenth Ohio, June 15; —— Ketchum, Eighty-third New York, June 29; D. B. Wren, Seventy-fifth Ohio, June 20.

D. H. STEUDNER, one of the staff of the German expedition to Central Africa under Baron Henglin, has died of fever after having passed through the dangerous miasmata of the morasses of the White Nile.

Original Lectures.

LECTURES ON
THE MORBID CONDITIONS OF THE BLOOD.

DELIVERED AT
THE BELLEVUE HOSPITAL MEDICAL COLLEGE.
PRELIMINARY TERM, SESSION OF 1863-4.

By AUSTIN FLINT, M.D.,
PROF. OF THE PRINCIPLES AND PRACTICE OF MEDICINE.

LECTURE I.

General Remarks on the Importance of the Blood.—Classification of the Constituents of the Blood.—Morbid Conditions relating to the Organized Corpuscular Elements.—Plethora.—Anœmia.

Gentlemen:—I have selected as the subject of the few lectures assigned to me during the preliminary term, the morbid conditions of the blood. I have selected this subject with reference, not so much to its attractiveness, as to its great importance. With our present pathological views, the question as to the existence of morbid conditions of the blood enters into the consideration of a very large proportion of diseases.

As expressive of the importance of the blood, it is distinguished as the *vital* fluid. In literature and common parlance, it represents life. "Life's blood" is a common expression. To have one's blood is to take life. Its importance is shown by the fact that its presence in all the so-called vital organs is indispensable to the exercise of their functions. A striking and familiar illustration of this fact is afforded by the temporary loss of the mental faculties and consciousness, as a result of a momentary arrest of the supply of blood to the brain, in syncope or fainting. The blood, in fact, may be said to be the grand condition of vitality. Its detention from a part occasions the molecular death of the part, i.e. gangrene or sphacelus. Its abstraction, beyond a certain limit, from the body, occasions general or somatic death. The suspension of its distribution by an arrest of the heart's action for two or three minutes only, is fatal. It forms a vital medium for all the organs essential to life, on which they are dependent, as the body or the blood itself is dependent on the surrounding atmosphere. The physiological relations of the blood to the solid parts being so intimate, it might reasonably be expected, *à priori*, that pathological changes in this fluid should give rise to corresponding morbid phenomena in the organs and tissues of the body. Observation shows this to be true. There are grounds for the belief that a large proportion of the morbid actions and changes which occur in the solid parts, are due to prior alterations in the blood. In many instances, as will be hereafter seen, the dependence of the former on the latter may be inferred, or rendered probable, although not demonstrable with our existing knowledge. Supplies for the growth and repair of all the body are contained in the blood. This fluid, therefore, represents, in its constituents, all the elements which enter into the composition of all the solid parts. It is taking but a step from the prosaic walks of scientific fact to the domain of fancy, to say that the blood is the solid body in a liquid state. "The blood is the centre round which the general metamorphosis of animal matter revolves, and in which it is perfected."* It might be rationally predicted that morbid alterations in its composition and distribution may lead to diseases seated in the solids, and this will be found to be the case. Another aspect foreshadowing the importance of the blood in its pathological relations, is its office as a reservoir for the accumulation of effete principles, the detritus of the tissues, which are to be eliminated by excretion. Here is a source of disease, as will be presently seen. Again, the physiological activity or mobility of the blood is very great. In this respect it is in striking contrast to the solid parts. It is the seat of unceasing changes, and yet, in health, maintains a uniform state as regards its organization and composition. New matter, derived from ingesta, is daily added in considerable quantity, and a proportionate amount is derived from the decomposition of the tissues. Portions are appropriated by the different structures. Other portions are secreted for various useful purposes in the economy. Other portions are thrown off or excreted. There is a constant interchange of gaseous elements with the surrounding atmosphere by means of respiration and through the cutaneous surface. Thus, it is the seat of constant and great changes, denoting wonderful activity, and yet its constitution remains the same. In this fact are admirably exemplified the precision and adaptation of the laws presiding over the safety and welfare of the organism. But this activity necessarily renders it more liable to morbid actions and conditions than the solid parts, which in health are less active and more stable.

The blood is a complex fluid. It contains a large number of ingredients, preserving, however, certain fixed anatomical characters. Anatomically considered, it consists of certain corpuscular bodies, viz. the red globules, the white globules or leucocytes, and globulins, which are suspended in a liquid called the *liquor sanguinis*, blood-plasma, or intercellular fluid. These are resolvable, by analysis, into numerous elements, some of which are organic, i.e. peculiar to organic bodies, and others inorganic or mineral. Examples of the organic elements are, fibrin, albumen, hæmatine, etc. The inorganic elements embrace various saline ingredients, iron, water, and several gases. Further details belong to anatomy and physiology. It is necessary thus to glance at the composition of the blood, in order to arrange its morbid conditions. These conditions relate to the different constituents of the blood; and, with a view to the consideration of pathological changes, the latter may be distributed into three groups. The first group will embrace the corpuscular, distinguished also as the organized, constituents. The second group will consist of the organic elements. The third group will comprise the mineral substances. Morbid conditions, affecting, severally, these three groups, will be first considered in the foregoing order, and afterwards, morbid conditions due to the introduction into the blood of substances which do not enter into its normal composition. Even with our present imperfect knowledge of the blood in health and disease, it is, in itself, a large field of study, which, considered as a distinct province of medicine, is called *hæmatology*.

Of the corpuscular or organized constituents of the blood, the most abundant and important are the *red globules*. The known morbid changes affecting these, relate, in the first place, to their number. They may be morbidly increased or diminished in number. An increase of the number of red globules beyond the healthy limit constitutes the morbid condition called *plethora*. A diminution below the limit of health constitutes the morbid condition called *anœmia*.

The relative proportion of the red globules to the other constituents of the blood may be increased by diminution of the latter. This obtains in a marked degree in epidemic cholera, owing to the draining away through the intestinal canal of the water of the blood, together with various elements held in solution by the transuded liquid. The density of the blood in this disease is notably increased; it becomes thick and heavy, and the circulation is mechanically impeded. Under these circumstances, the red globules are relatively in abnormal excess, although they are actually less in number than in health. The term plethora is only applicable to an actual increase of the number of the red globules. This is now the significance of the term, without regard to the quantity of the mass of blood. An increase of the mass, causing over-repletion of the vessels, does not constitute plethora, although implied in the etymology of the term. This condition is called *polyæmia.* Its existence to an extent sufficient to constitute a morbid condition of importance, is doubtful.

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* Lehmann.

The functions of the red globules in health are not fully understood. Their relative normal ratio to the other constituents of the blood differs considerably in different animals, and they appear to sustain a certain relation to vigor, strength, and activity; that is, they are abundant in races, breeds, and individuals, in proportion as the general attributes of the body just named are marked. Their importance is shown by the fact that animals bled nearly to death may be reanimated by injecting into the veins red corpuscles suspended in serum, and not by the introduction of the other constituents of the blood without the red corpuscles. From what is known of their physiological relations, it might be inferred that the effects of their morbid excess would be over-activity of the circulation and undue excitement of organs in proportion to their normal activity and the quantity of blood which they receive in health. The phenomena of plethora denote these effects. The power of the heart's action is increased. The temperature of the body is raised. The brain is stimulated, giving rise to unusual mental energy and excitement. Sensibility and muscular irritability are augmented. In comparing, however, different persons, it is not easy to draw the line of demarcation between more or less intensity of the so-called sanguine temperament and plethora. A better idea of plethora, as a morbid condition, is formed by a comparison of the same person at different periods, and especially if the person have naturally a temperament not notably sanguine. He acquires more color in the prolabia and face. The mucous membranes are reddened. The pulse is full and strong. The heart's impulse is increased. The physical and mental powers are more active. The body is notably warm. Pain in the head is readily induced by stimulants or mental excitement, owing to the abnormal power of the circulation. This condition involves a liability to active cerebral congestion. It is supposed to constitute a predisposition to acute inflammations. It doubtless tends to render inflammations more intense, and to increase the symptomatic febrile movement. It may favor hæmorrhages, especially into the brain, by means of the increased force of the circulation. On the other hand, an abundance of red globules exempts from nervous disorders, to which, as will presently be seen, a paucity of red globules predisposes.

The causes of plethora are, first, a constitutional tendency, which may be congenital and inherited; second, overfeeding, with the use of generous wines and condiments; third, diminished expenditure of blood constituents in nutrition, incident to ease, idleness, and luxurious habits, the digestive and assimilative functions remaining active; and fourth, the arrest of periodical or habitual hæmorrhages, or some other drain to which the system had become accustomed. These several causes are frequently combined.

It is important for the physician to appreciate the condition of plethora, in order to avert the evils to which it tends, by appropriate management. And, as an incidental element in different diseases, it is to be taken into account in considering the effects of therapeutical measures. It is relieved, for the time, most promptly and efficiently by bloodletting. An immediate effect of the abstraction of blood is a notable reduction in quantity of the red globules. Of course, the propriety of resorting to bloodletting will depend on the degree of plethora and the apparent imminency of evil results. Other means to diminish the excess of red globules are, a reduced diet, as regards the quantity and quality of food, and exercise, in order to increase the expenditure of blood-elements in repairing muscular waste, and render the amount of eliminated matter more abundant. Certain medicines appear to exert a direct effect upon the number of red globules. Mercury is such a remedy, as shown by the pallor which accompanies salivation. Mercurialization, however, is never indicated for the attainment merely of this object.

It is important not to confound plethora with other morbid conditions of the blood or circulation. Fulness of the vessels, due to some impediment to the circulation, has not unfrequently been considered as plethora. This may exist where the red globules are diminished, rather than increased. A pseudo-plethora, for example, is not uncommon in pregnancy, the red globules being diminished in this state. Bleeding was formerly employed with reference to this pseudo-plethoric condition, of course with an injurious effect on the constitution of the blood. With pseudo-plethora, or fulness of the vessels, there is often evidence of deficient oxygenation of the blood, together with dulness and oppression instead of heightened activity of the functions of the brain and other organs. True plethora is to be determined by the symptomatic phenomena which have been mentioned, taken in connexion with the evidence afforded by the pulse and other symptoms of an unobstructed, free circulation, with the activity of the digestive and assimilative functions, and the existence of one or more of the conditions under which this morbid condition is known to be produced. A microscopical examination of the blood may suffice to determine the existence of the plethora, if the observer be sufficiently practised to decide whether the red globules in several successive specimens are in excess or not. It may be determined by quantitative analysis, but the process is too tedious and delicate for ordinary clinical purposes.

As regards the essential pathological nature of plethora, all that can be said is, it consists in a hypergenesis of the most important of the organized or corpuscular constituents of the blood, the red globules. The pathologist might expect to explain this morbid condition more fully, if the physiologist were able to tell us where and by what process the red globules are normally produced.

A morbid diminution of the red globules of the blood constitutes *anæmia.* The etymology denotes diminution of the mass of blood, but, conventionally, the term is used to signify reduction of the quantity of red globules. *Spanæmia* is sometimes used in the same sense.

The purest exemplification of anæmia is afforded by cases in which it has been produced by copious hæmorrhages or repeated bloodlettings. It is not easy to effect, except for a transient period, a considerable reduction in the mass of blood. After a loss by hæmorrhage or bloodletting, the quantity of liquid which has escaped is quickly replaced, but the red globules are not so speedily renewed, and, hence, the latter continue for a greater or less period to be deficient. This condition is one of the forms of so called impoverished or poor blood. The degree of impoverishment varies. The proportion of red globules has been observed to fall below the normal range (120 to 130 in 1000 parts) to 70, 60, and even 21 to 1000 parts.

Anæmia is of frequent occurrence. It is incident to a variety of diseases. It gives rise to a multiplicity of phenomena. It is a condition highly important for the physician to appreciate and recognise. The knowledge of this condition obtained within late years constitutes one of the most striking of the characteristics of modern medicine in view of its importance on medical practice. It occurs much more frequently than the opposite morbid condition, viz. plethora.

In general terms, the pathological effects of anæmia are the reverse of those due to plethora. The power of the circulation is diminished, and there is a deficiency of the functional energy of different organs, the more marked in proportion to the quantity of blood which they receive in health. The phenomena denote these effects. The animal temperature is lessened. Anæmic patients have coolness of the surface, and especially cold extremities. They are not so able to resist cold as the plethoric. The action of the heart is feeble; the pulse is small, weak, compressible. The action of the heart is easily disturbed, becoming rapid from slight causes, and frequently irregular. The mental energy is diminished; persons are not adequate to the intellectual efforts of which they are capable in health. The strength of will and determination of purpose are impaired. The vital functions are languidly performed. The muscular strength is diminished. The surface is pallid from the deficiency of the hæmatine or coloring matter contained in the red globules. This pallor is apparent in the face, and especially the prolabia. The mucous membranes accessible to view have less redness than in health. The countenance at once denotes the existence of anæmia if the condition be marked.

It induces a multiplicity of morbid phenomena arising from disordered action of the nervous system. The relations of the blood to the functional activity of the nervous system are strikingly shown in the morbid phenomena pertaining to the latter, which spring directly from morbid conditions of the former. And the special relations between the red globules and the nervous system are shown by the phenomena incident to anæmia. These phenomena are numerous and diversified. The more frequent and prominent are as follows:—Mental depression, anxiety respecting health, hypochondriasis, irritable temper, want of buoyancy and energy, a feeling of lassitude and a painful sense of inertia or indolence. There is apt to be a feeling of incapacity for muscular exertion greater than the actual loss of muscular power. The physical and mental powers are especially depressed during the process of digestion. Palpitations frequently occur, so that organic disease of the heart may be suspected by those not conversant with physical means of diagnosis, and is greatly feared by the patient. Neuralgia in various situations is apt to occur, and in females hyperæsthesia of the abdominal walls simulating peritonitis. The varied symptoms which have been heretofore described as belonging to spinal irritation, are likely to occur in connexion with anæmia. It sustains a causative relation to nearly all the functional affections of the nervous system embraced under the head of the *neuroses.* A large proportion of persons affected with any one or more of this class of maladies are anæmic; and, conversely, a large proportion of anæmic persons become affected with neurotic disorders. It is highly important that this pathological element be taken into account in the management of the neuroses. When it occurs independently of the various affections with which it is connected incidentally, it is characterized especially by phenomena relating to the nervous system. These phenomena may be said to constitute the pathological expression of this morbid condition of the blood.

If it be asked, what is the explanation of the occurrence of these phenomena in consequence of a diminution of the red globules, the pathologist can only say that he may hope to answer the question when the physiologist is able to explain the normal relation between the presence of the red globules and the functions of the nervous system. Pathological facts show that an essential relation does exist between these two anatomical elements of the body. The nervous system depends on this blood-constituent for the manifestations of healthy life, and, hence, a deficiency occasions manifestations of disordered life, or morbid vital phenomena.

The causes of anæmia, when it exists independently of the various affections with which it is associated, are frequently obvious, but in some instances not assignable. It is a result of hæmorrhages, from wounds, flooding after labor, and in cases of menorrhagia, or injudicious blood-letting. It may proceed from deficient alimentation; the food being insufficient in quantity or not sufficiently rich in alimentary principles. It is caused by a loss of certain of the elements of the liquor sanguinis or blood plasma, which are necessary to the production of red globules. Thus, frequent causes are prolonged lactation and a rapid succession of pregnancies. The obvious causes may be arranged into the three classes just stated, viz. 1st, Causes which involve an actual loss of red globules, as in hæmorrhages; 2d. Causes involving a defective supply of materials for assimilation; and, 3d. Causes which occasion expenditure of the constituents of the liquor sanguinis on which the production of the red globules is dependent.

The causes are not always apparent. Anæmia is apt to occur in females at or near the age of puberty, where there has been no loss of blood, no deficiency in alimentary supplies, and no unusual expenditure of blood-plasma. Under these circumstances it constitutes the affection to which the name *chlorosis* was applied before the anæmic condition was fully understood. If this name be retained it should be considered as denoting anæmia occurring under the circumstances just stated. It appears to be in some way connected with the evolution of the reproductive functions. In some cases it may be accounted for by the derangement of the assimilative functions at this period. In these cases the appetite is poor, the digestion disturbed, and there is apt to be a craving for indigestible, innutritive substances, such as chalk, slate, coal, etc. Addison has described cases of anæmia occurring without any obvious causation, accompanied by general debility, which progressively increases, at length ending fatally without appreciable lesions of any of the vital organs. Cases of this kind are occasionally met with, especially in hospital practice. Addison distinguishes them as cases of "idiopathic fatal anæmia." In a certain proportion of these cases, the surface of the body, to a greater or less extent, assumes a dark discoloration or a bronzed appearance, and in several successive cases the supra-renal capsules were found to be more or less disorganized. Addison inferred from these facts a pathological connexion between disease of the supra-renal capsules and the bronzed hue of the skin. Clinical observation, however, shows that the two events are not uniformly associated.

In a large proportion of the cases in which anæmia exists, it is incidental to, or a pathological element of some other affection. And, as thus associated, it may, or may not, claim the special attention of the practitioner. Of the great number of diseases in connexion with which it is connected either constantly or frequently, the following list will inclose the more prominent.

1. Tuberculosis. Anæmia is generally early developed in tuberculous affections, and may precede the deposit of tubercle.

2. Carcinoma. The pale, waxy, or straw-colored complexion which characterizes some cases of carcinomatous disease, denotes anæmia.

3. The affections embraced under the name of Bright's disease. Associated with œdema of the face, the pallid complexion of anæmia becomes quite characteristic of these affections. The blood-changes which belong to these affections (to be hereafter considered) lead to diminution of the red globules.

4. A host of affections which involve expenditure of other constituents of the blood than the corpuscles, *i.e.* constituents of the *liquor sanguinis,* such as chronic dysentery and diarrhœa, chronic pleurisy, purulent formations in any part of the body, leucorrhœa, etc.

5. Affections which involve loss of corpuscles, or hæmorrhage, as menorrhagia, hæmorrhoids, hæmatamesis, etc.

6. Affections compromising the assimilative functions by occasioning indigestion, vomiting, loss of appetite, etc.

7. Certain affections of the liver, and especially cirrhosis. It has been supposed that the red globules are produced within the liver. If this be true, diseases of this viscus may lead to their diminution by interfering with their production. But in cirrhosis this effect is due in a measure to the obstruction to the introduction of fresh alimentary supplies brought by the portal vein.

8. The periodical fevers, if protracted. The special cause of these fevers may induce anæmia even where the fevers are not developed. Persons inhabiting regions called miasmatic, are apt to become anæmic, although they do not experience fever.

Certain mineral substances introduced into the system lessen the red globules in a notable degree. This is true of lead. Anæmia is a pretty constant element of saturnine diseases; and it is observed in persons exposed to lead emanations before becoming affected with the characteristic diseases. The same is true of mercury. Mercurialization quickly reduces the quantity of red globules in a marked degree.

Original Communications.

UPON GUNSHOT WOUNDS OF THE KNEE-JOINT,

WITH CASES.

By JOHN A. LIDELL, Surg. U.S.V.,
IN CHARGE OF STANTON HOSPITAL, WASHINGTON, D.C.

The surgical relations of gunshot injuries involving the knee-joint, are more important than those pertaining to any other articulation in the whole body, because of the greater size of the joint, and the superior danger which experience has shown to attend all derangements of its structure. Wounds of the osseous tissue belonging to this articulation, are much graver in character than wounds of the soft parts. It sometimes happens that a musket-shot hits the knee in such a way as to open the joint to greater or less extent, without breaking bone, and the patient gets well with a good limb. I have seen three cases of this kind, all of which terminated favorably. It happens more frequently, however, that a bullet impinges against the knee, in such a manner as to course along beneath the integument for a distance greater or less, in close relation to the synovial membrane, but without entering its cavity; and of such cases almost all make good recoveries, provided they are subjected to appropriate treatment. But if, on the other hand, the articulating end of either the femur or the tibia happens, at the same time, to be splintered by the bullet, the nature and character of the case are entirely changed. The patient will not make a good recovery. Sooner or later the joint will swell up, having become highly inflamed, great constitutional disturbance will also be developed, and the patient will ultimately lose his life if the limb is not removed by timely amputation.

But a bullet passing through the knee-joint does not always splinter the bone, or otherwise break it into fragments. It may cut a simple groove in the spongy epiphysis of the femur or the tibia, as the case may be, without doing any other mischief to the osseous structure. In this way a bullet may pass through that articulation, from before backwards, and the patient finally recover with a stiff joint. I have known one case of the sort.

The most dangerous cases, however, are those wherein the bullet enters the limb at a distance (greater or less) from the joint, and without opening the cavity of the synovial membrane, or perhaps without even coming into relation with it, shatters the bone in such a way that the fissures extend to the cartilage covering the articulating end of the bone, or even into the synovial cavity itself, if the splintering happens to be very great. The danger of these cases is much increased by their insidious character. The patient may do well for eight days or even two weeks after he is wounded, and then of a sudden be seized with great pain in the joint, followed speedily by heat, tenderness, and much swelling. At the same time he has constitutional disturbance in the shape of surgical fever and great restlessness. Now, if the traumatic origin of this arthritis happens to be overlooked, and if the case is put under treatment as if it had begun spontaneously, then the inflammation will extend rapidly from the joint to the thigh, and in a short time involve it so extensively, that, if the surgeon shall now wish to remove the limb by amputation, he cannot find healthy tissues through which to operate; and before long the thigh will be converted into a vast abscess communicating with the joint. These are the so called cases of secondary inflammation of the knee-joint, and are certain to turn out badly if the limb is not amputated in season. As soon, therefore, as this form of traumatic arthritis develops itself, its exceedingly dangerous character should be recognised, and the limb cut off before the inflammation has had time to spread through the thigh in the form of diffuse cellulitis. In all such cases amputation must be performed early, if it is expected to save the patient.

With regard to the treatment of gunshot injuries, in general, of the knee-joint, I believe that in all cases of wounds of the soft parts alone, whether the synovial sac be opened or not, an effort should be made to save the limb, provided the loss of substance is not great. For this purpose the patient should lie still in bed, and have ice constantly applied to the seat of injury, quietude and ice being the most reliable agents for cure in such cases. If, however, the loss of substance be extensive, as in case of certain wounds inflicted by the explosion of shells, primary amputation should be performed. Again, if the bullet pass completely through the joint, cutting simply a groove on the articular surfaces, without comminution or splintering, I believe it to be our duty to try to save the limb; but if severe arthritis should supervene, it will then become our duty to amputate without delay. In all cases of wounds in the neighborhood of the knee-joint, associated with comminution and splintering of the articular end of either the femur or the tibia, amputation should be performed as soon as the diagnosis is made out. In some cases the diagnosis is readily made by exploring the wound with the finger; in other cases it will be difficult to make, and even uncertain, until the secondary arthritis has appeared, as happens when the shaft of the femur has been split by a conical bullet, the fissure extending to the knee-joint.

Case I.—Private W. V., Co. D, 4th Pennsylvania Cavalry, aged 22 years, and of sound constitution, was admitted to Stanton Hospital June 24, 1863. He had received a gunshot wound in the neighborhood of the right knee June 20, four days previously. The bullet (carbine) entered the limb on its anterior inner face, a short distance below the joint, passed backwards and upwards, escaping through the popliteal space, apparently without opening the joint. From the course and direction of the wound we supposed the upper part of the tibia to be injured. At time of admission patient's condition was good. There was no pain, heat, tenderness, or swelling, in the injured knee. He was directed to refrain from using it, by remaining quietly in bed, to have ice applied to the wound constantly, so as to lessen the danger of inflammatory action therein, and to be supported by a nutritious diet. Under this treatment his case progressed without an untoward symptom, till July 5, eleven days after admission to hospital, and fifteen days after the infliction of the wound. At inspection on this day I specially noticed his condition as very promising, the anterior orifice of the wound being nearly healed. But about the middle of the following night he was seized with great pain and distress in the injured knee. The officer of the day was called to him, and administered morphia in full doses, but without producing much relief. July 6, morning.—He complains of intense gnawing pain in the right knee; it is much swelled, hot, and exceedingly tender: he cries out from agony occasioned by pain, although the pupils are markedly contracted, from the large quantity of the anodynes taken; countenance expressive of great distress; pulse frequent, quick, and irritable; skin hot and dry; has thirst, and a coated tongue; has had a slight chill. Ordered free abstraction of blood by cups from the neighborhood of the knee. Hydrarg. chlor. mit. grs. x., and anodynes, to make him comfortable, if possible.

July 7.—Morning: Patient's condition not materially changed from yesterday. Seeing that the arthritis was secondary to a gunshot wound, and believing that it was associated with fracture and comminution of the upper end of the tibia, amputation appeared to be the proper remedy. Accordingly that operation was performed in the lower third of the thigh by the circular method, about midday, thirty-six hours subsequent to the attack of arthritis. Anæsthesia was produced by sulphuric ether. He bore the operation well.

On examination of the amputated limb, the inner part of the head of the tibia was found to be extensively injured by the bullet: a deep furrow had been ploughed in the bone, associated with much comminution, and some of the fragments were connected directly with the joint. The cavity of the joint was found to contain about four ounces of dirty-brown colored viscid liquid, in which yellowish shining globules (synovia) floated, looking like oil. A quantity of the same dark-colored liquid had been squeezed out through the posterior orifice of the gunshot wound, while amputation was being performed. The lining membrane of the joint had entirely lost its polished and shining appearance. It was also stained with a dull red hue, throughout its whole extent, from the coloring matter of the blood, which had been effused into the joint. The staining extended to the depth of about a line. The articular cartilage, at the seat of injury, was undergoing fatty transformation. The internal semilunar cartilage covered over completely the fissures in the head of the tibia, so that the contents of the joint could not readily escape.

The patient did well after the operation, and at the present time (Oct. 1st.) the stump is nearly healed.

Case II.—Private S. K., Co. "E," 7th Michigan Cavalry, aged 29 years, was wounded by a carbine-shot while on duty at Chantilly, Va., June 19th, 1863 The bullet entered the front of the left thigh at about its middle, and passing downwards and inwards, lodged beneath the skin on the inner side of the knee joint. He was brought to Washington and admitted to Stanton Hospital six days afterwards (June 25).

June 27th.—The bullet (a conical carbine one) was readily extracted by making an incision down upon it. Its situation was superficial, and the joint did not appear to be involved with it in any way. The joint was neither swelled nor tender July 2d. (Five days later).—Some pain and swelling of left knee were noticed for the first time; ordered an ice-bag to be kept on the knee. 4th.—The swelling has extended up the thigh, which was painted with tinct. iodin on that account. 5th.—He had fever, with a quick pulse and a furred tongue: the neutral mixture was prescribed for him. 6th.—There was well-marked erysipelas of the left thigh, and well marked effusion in the knee-joint: he was directed to take tinct. ferri muriat. gtts. xx. every six hours, to use alcoholic stimulants freely, and to have a nourishing diet. 8th.—The erysipelas extended up to the groin, and the pulse was frequent and feeble: same treatment continued. 12th.—The discharge of pus was free, the tension and swelling of the thigh sensibly diminished, but he was manifestly failing in flesh and strength: same treatment continued. 17th.—He continued to fail, and rejected all nutriment except beef tea: continued same treatment with the addition of quinine. 18th.—He was seized with diarrhœa; he sank and died in the evening.

The autopsy showed that the bullet had lacerated the sartorius muscle extensively, and splintered the internal condyle of the femur: that the joint and the cellular tissue of the thigh were filled with dark-colored and very offensive pus, and that the articulating surfaces of the femur and the tibia were denuded of cartilage. There was but little, if any displacement of the fragments of broken bone.

This case interests me very much, because, June 27th, when the bullet was extracted, there was not the slightest evidence of injury of the inner condyle of the femur, nor indeed of any other bone whatever. He had walked into the ward unassisted when admitted to hospital. The bullet was quite superficial, and readily extracted by making a simple incision through the skin, upon it. At this time it was not in relation with the injured condyle. During the eight days which elapsed between the receipt of the wound and the extraction of the bullet, the said bullet must have slipped away from the fractured part of the condyle into a new position just underneath the integument, and towards the front part of the articulation.

When, therefore, on the 2d day of July, a moderate amount of inflammatory trouble appeared in the knee, we thought it to be due to the extension of the mischief through the soft parts to the joint, and that it was not due to injury of the bone. Again, when the true character of the difficulty was recognised, it was too late to amputate, because the whole thigh was involved with diffuse cellular inflammation.

This case also affords a good illustration of the obscurity of the symptoms, and the difficulty of the diagnosis, which may attend even serious gunshot injury of an articulation so thinly covered with soft parts, and so easy of examination from every side, as the knee-joint.

Washington, D.C., Oct. 1, 1863.

DISLOCATION OF CLAVICLE,

DIRECTLY UPWARDS, AT ACROMIAL END—UNREDUCED AT THE END OF ONE YEAR—USE OF ARM PERFECT.

By FRANK H. HAMILTON, Jr., Act. Assist.-Surg. U.S.A.

Private Jas. O'Brian, Battery M, 1st Artillery, æt. 26, was injured, September, 1862, by jumping off from a horse car while in motion. His foot caught, and he fell between the two steps, while one wheel traversed the shoulder and breast below the clavicle on the right side. A three-quarter inch bolt was driven through the integuments just above and within the axilla, comminuting the first rib, severing the acromio-clavicular attachments, thus producing a complete upward dislocation of the clavicle at this point. He was removed to the Long Island College Hospital, Brooklyn, but owing to the extensive external injuries no attempt was made at the reduction of the bone, nor were there subsequently any apparatus or splints applied to the shoulder. At this date the clavicle still remains in the position it occupied the moment after the accident. The bone is removed full two inches directly upwards from its normal position, with merely a long slim tendon connecting it with the acromion process.

The point of interest in this case, is, that the strength of the injured arm is in no wise impaired. Wishing to obtain an accurate knowledge as to the comparative strength of the two arms, I made some experiments a day or two since. The following is the result:—

He lifted from the ground, and sustained above his head, with the arm fully extended,

With the right arm, 56lbs. 3oz., for thirty seconds.
" left " " " " "

At arm's length, at right angles to his body,

With right arm, 25lbs., fifteen seconds.
" left, " seventeen seconds.

The performances of the arms are as nearly alike as are those of most men. He is conscious of no weakness at all in the injured arm. This case may be of value at some time in a medico-legal point of view.

Medical Appointments.—Dr. D. S. Conant has been appointed Professor of Anatomy, and Dr. Wm. M. Chamberlain, Lecturer on Obstetrics, in the New York Medical College.

M. Berthelot tells us that the principles which give to wines their vinous flavor, may be isolated by shaking the wine with ether, and evaporating the ether at a low temperature, without the contact of air. An extract is thus obtained whose weight is less than one-thousandth of that of the wines. The vinous flavor and the bouquet are concentrated in this extract, which is rapidly decomposed by exposure to the air.—*Brit. Jour.*

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, May 13, 1863.

DR. D. S. CONANT, PRESIDENT, IN THE CHAIR.

LIPOMA.

Dr. Voss presented a specimen of lipoma from the side of the right tibia of a patient aged but seven months. The mother said that when the child was but four months old, she noticed a small growth on the side of the leg, about the size of a pea, and since that time the tumor grew rapidly to the size of a small orange. The supernatant skin was firmly attached to the growth. Though no diagnosis of the nature of the disease was made, Dr. Voss was nevertheless inclined strongly to favor the supposition of malignant disease. On removal, it was found to consist simply of fat. The specimen was interesting, in the first place, on account of its situation, and in the second place, in reference to the age of the patient.

Dr. Voss recollected a somewhat similar case which occurred in his own practice. The patient was a boy but a year old, who had a lipoma a little larger than the one presented, but situated on the lumbar region.

NECROSIS OF LOWER JAW.

Dr. Voss presented two sides of the lower jaw, together with several smaller pieces, which he had removed from a child seven years of age, on account of necrosis. The Doctor saw the child for the first time in October last, and found the jaw very much swollen, and there was also a fœtid discharge from some fistulous openings in the mouth. By introducing a probe into these openings, the nature of the disease was readily discovered. Previous to the attack of periostitis, which, by the way, occurred simultaneously on the two sides, the child had never suffered from any sickness. The dead portions of bone were removed from the inside by enlarging the fistulæ, and consisted of the two articular processes, coronoid processes, angle, and that portion of the body of the bone not included in the chin. Subsequently to this, various other pieces of bone were removed, including several of the teeth. The patient made a good recovery, the wounds healed up kindly, and new bone has appeared in place of that which has been removed. There is no deformity perceptible, save a retraction of the chin and a want of prominence at either angle of the jaw. In consequence of this retraction, the tongue is thrown back somewhat upon the larynx, and the child has a slightly noisy respiration. It was the intention of Dr. Voss to show the child in connexion with the specimens, but the inclemency of the weather prevented.

Dr. Elliot remarked, that in a case where Dr. Carnochan removed the entire lower jaw, the deformity was not enough to be noticed by any save a professional person.

Dr. Garrish referred to the case of a child, five years of age, who lost three-fourths of the lower jaw by necrosis, the result of salivation from only four grains of calomel given at a dose.

Dr. Voss stated that there were no evidences of either phosphorus or mercury acting as a cause of the disease; in fact, he was at a loss to decide what was the cause, unless, perhaps, the second dentition might have had something to do with it. It was certainly very strange to him how both sides of the jaw were simultaneously affected.

TUMOR FROM CICATRIX.

Dr. Post presented a small tumor removed from an old cicatrix. The patient was 50 years of age, and fourteen years before had a tumor, supposed to be cancerous, removed from the epigastric region. It was situated four inches above the umbilicus, almost exactly in the median line beneath the abdominal integument, its deep surface being in close proximity with the abdominal aponeurosis. It had been but five months in growing to the size of a goose-egg. As no microscopical examination had been made of it, it was moved that Dr. Voss be a committee to report upon its composition at the next meeting.

DISEASE OF COLON—APOPLEXY.

Dr. Lewis Smith presented a portion of the colon which had been removed from a man who died at the age of 50 years. Dr. Smith knew nothing of the case previous to the autopsy. The patient had had pretty good health until about a year before his death, when he was attacked with apoplexy, followed by paralysis of the left side, which, however, gradually disappeared, though the mind remained impaired. Three or four months before his death he had symptoms of gastro-enteritis, and from that time until his death he complained of a good deal of distress in his bowels, and suffered from constipation. There was also present a good deal of meteorism, and his attending physician thought that he detected serous effusion in the abdominal cavity. About three days before death the patient had a second attack of apoplexy, from which he never recovered.

The autopsy revealed a considerable amount of serum in each pleural cavity, the result of a non-inflammatory effusion. The heart was considerably enlarged, but the valves were perfect; the ascending aorta and transverse portion were considerably enlarged, and there were found patches of atheroma over the inner surface of the vessel. The stomach was somewhat distended, and its mucous membrane thickened, as was also the mucous membrane of the duodenum. The jejunum and ilium seemed normal. The colon was found eight feet in length, and its mucous membrane was vascular and much thickened. The vascularity presented a slate-colored appearance, proving that the inflammation had existed for a considerable length of time.

On removing the calvarium the surface of the brain was found less vascular than usual. The lateral ventricle of the left hemisphere was filled with liquid blood, and at its side in the substance of the anterior and middle lobes, the brain substance was lacerated to the extent of three inches in length by three in breadth, inclosing a clot of the same side. A little blood had passed through the foramen of Munro into the right ventricle, and had settled into the posterior cornua In the right ventricle were also found the remains of the old clot, which had of course existed there for about a year. In its centre it had undergone the calcareous change. On microscopical examination the calcareous substance was found to consist of carbonate of lime, together with crystals of cholesterine. There were no evidences of laceration of the brain substance as the result of the previous attack of apoplexy.

GUNSHOT WOUND OF NECK.

Dr. Finnell exhibited the results of a gunshot wound of the neck. A man, twenty-five years of age, was shot in the neck about four weeks before, the ball entering in the right side, on a level with the cricoid cartilage. The shock which followed the injury, was considerable, and when the patient was first seen by Dr. Finnell, a surgeon was endeavoring to extract the ball. A probe had been passed into the opening, and had been felt near the mastoid process; and the surgeon, being convinced that the ball was to be found in that neighborhood, had made a counter-opening with a view of coming down upon it. He, however, did not succeed in finding it, and Dr. Finnell had the patient removed to St. Vincent's Hospital. Soon after the admission of the patient, it was evident that extravasation was going on in the deep tissues of the neck. The hæmorrhage from the bullet wound was very slight. At nine the following morning, two hours after the injury, the patient was found suffering a great deal from difficulty of swallowing, and also dyspnœa; the tumefaction in the neck was steadily increasing, and it was very evident that something should be done to relieve the patient. Accordingly, at one o'clock, sixteen hours after the injury, Dr. Finnell made an incision by enlarging the original wound, in order to explore for bleeding vessels, at the same time to relieve the tension of the parts. The incision was carried across the neck to meet the counter-opening that had been made. The sterno-cleido mastoid muscle was cut across, and on its posterior surface a small vessel was found severed, and was tied. A large quantity of clotted blood was thrown out from under the fascia, and the patient at once experienced great relief. An exploration was made, but on account of the burrowing from extravasation, no track of the bullet could be found. Immediately after being wounded the patient complained of numbness in the right arm and right hand. The wound was carefully closed after the operation, and the patient was left in the care of the House-Surgeon. Everything went on well until the eleventh day after the injury, when there was a sudden gush of blood from the wound, which left the patient almost pulseless. The House-Surgeon, who was immediately by his side, carried his thumb into the wound, and made compression, succeeding in arresting any further hæmorrhage; but the patient had lost too much blood to recover, and gradually sank and died in the course of five hours afterwards.

On post-mortem examination the ball was found to have passed directly posterior, lodging in the transverse process of the sixth cervical vertebræ. The opening made by the ball was hardly large enough to admit the introduction of a good-sized catheter, but the ball, in striking against the bone, had so flattened itself out as to cover three times as much space. The vertebral artery was found severed in the situation of the bullet, and it was from this source that the hæmorrhage occurred which produced the extravasation; but the fatal hæmorrhage was caused by sloughing through of the coats of the common carotid artery, the result of injury received in the transit of the missile. The numbness of the arm and hand was explained by the pressure of the bullet upon one of the branches of the cervical nerves.

The tongue, larynx, and œsophagus were exhibited, giving evidences of extensive submucous infiltration.

The specimen was interesting in several points of view, but particularly with reference to the illustration which it afforded of the want of reliability in the course which a probe may take when there has been extensive extravasation.

FIBRO-RECURRENT TUMOR.

Dr. Sands exhibited a fibro-recurrent tumor, the size of an English walnut, which had been removed from the cheek of a child twelve years of age. The disease first began to make its appearance about two years ago; it grew gradually without giving pain, and although affecting the general health, there was no lymphatic enlargement. The tumor had a somewhat pyriform shape, cut hard, was of a mottled red and white color, and yielded on section a juice which was suspended in water. Yet, notwithstanding its gross appearances, it gave all the characteristics under the microscope of a fibro-recurrent tumor; there were seen elongated, fusiform, and caudate cells, with nuclei and minute nucleoli, together with free nuclei and nucleoated nuclei. There was also a stroma of a fibrous tissue.

INTRA-UTERINE TUMOR.

Dr. Sands presented a second specimen for which he was indebted to Dr. Livingston. It consisted of an intra-uterine tumor removed by post-mortem examination from a patient forty-five years, married, and the mother of several children, the youngest child being twelve years of age. When the patient first consulted Dr. Livingston she complained of a serous discharge. She was examined by Dr. Livingston, who recognised the existence of a tumor within the uterus. The examination was conducted by means of the uterine sound, but the size of the tumor was not estimated. The menstrual function had always been well performed, and there had been no hæmorrhages previous to that time. The woman passed from under the notice of Dr. Livingston until a few months ago. She was then very much emaciated, having just recovered from a severe hæmorrhage, which she had suffered from a month or two previous. She finally died of exhaustion.

On making the autopsy he discovered the tumor situated in the interior of the womb, having a very extensive attachment to the fundus and anterior wall of the organ. The growth had so much distended the uterus as to give the appearance as if in the fifth month of pregnancy. The mass was covered throughout its whole extent by mucous membrane. Dr. Sands thought that the question of removal might come up in this case, and be entitled to very serious consideration.

Dr. Post remarked that Dr. Atlee, in his Prize Essay on uterine tumors, speaks of a variety of tumors within the uterus similar to the one presented, in which he succeeded in nucleating.

Dr. Voss had seen Dieffenbach remove an intra-uterine tumor, weighing seven pounds, by means of a curved scissors.

Dr. Markoe remarked, that the specimen was a very interesting one in reference to the question of removal. He stated that tumors within the uterus were divided into classes:—1st, Those partly within the uterus, and partly without, and, 2d, Those wholly within the organ. In the first class removal was possible by means of incision through the vagina. Operations of that sort were not unfrequent, but the removal of tumors of the second class, though occasionally reported in the foreign journals, was very rarely performed in this country. He had a case of the sort in a lady who had borne several children, and whose menstruation had gradually grown more and more profuse, until it had amounted to alarming hæmorrhages. On examination a tumor was found attached to the posterior surface of the organ, and after dilating the os sufficiently to get at the mass the Doctor concluded to attempt its removal. After failing with several instruments to accomplish the purpose he resorted to his finger, and enucleated the mass piecemeal. The result was a perfectly satisfactory one. She did perfectly well for eighteen months, when, however, other tumors developed, and increasing, have crowded the organ up into the abdomen. In consequence of the situation of the organ she is now troubled no more with hæmorrhages. The tumor removed was about the size of the one presented by Dr. Sands.

Dr. Post stated that Dr. Atlee recommended in cases of uterine tumors, attended with hæmorrhage, an incision upon their surfaces.

The Society then adjourned.

In the last number of the *Social Science Review*, Dr. Richardson calls attention to the "Greek fire," lately brought into especial notice through the siege of Charleston: "The construction of modern 'liquid fire'," he says, "is based on simple scientific principles. I think that it might be so formed that it would actually burn under water. The principle is this: a rapidly oxidisable substance is suspended for a time through a liquid, in which it is held innocuous so long as the two are confined together, but from which it is separated spontaneously when both are set free in the open air. The modern chemist who first brought liquid fire into notice was Mr. Wentworth Scott. Mr. Scott suggested the principle about eleven years ago, and during the Russian war he was untiring in his efforts to get it into use in our army and navy. An official board received Mr. Scott, heard his plans, nibbled at his idea, and then repudiated it. After tantalising Mr. Scott, our circumlocutionists became acquainted with another gentleman who proposed a liquid fire, but who, I believe, in the end was gently dropped also—I mean Captain Disney. At last, that which the English nation, or rather Government, refused to study as a means of warfare, has been turned to practical account in America.—*British Jour.*

American Medical Times.

SATURDAY, OCTOBER 24, 1863.

EFFICIENCY OF THE ARMY SURGEON.

The medical staff of our volunteer army has been subjected to much scandal and harsh and unjust censure for alleged incompetency. It has, in truth, become popular to talk disparagingly of the army surgeon, and sweeping denunciations are made against the entire staff on account of the reprehensible conduct of individual members. It is rare, even in our own profession, that the position of the volunteer surgeon before and after entering the army is correctly appreciated. In an address before the Albany County Medical Society, Dr. S. Oakley Vanderpoel, late Surgeon-General of this State, has given his large experience in relation to the qualifications of surgeons, and of the manner in which they have performed their duties. We shall be pardoned for quoting freely from this interesting address, which has not been published. Dr. V. speaks with authority upon the subjects which he touches, for few have been brought in contact with a larger number of volunteer surgeons.

He discusses the duties of army surgeons under the following heads, viz. 1st, as hygienists; 2d, as physicians; 3d, as surgeons. He remarks that the mass of the community, indeed the mass of physicians, limit the province of medical men to simply *caring for the sick;* with convalescence their responsibility and labor cease. It is comparatively of recent date when that higher element has been distinctly recognised and studied—the prevention of the causes of disease, and their removal from those in health. Nor is it strange the former idea should be the one prominent. The great mass of medical men who have entered the military service are necessarily from the country or from small communities. A man living among rich fields, wooded hills, and running streams, has little cause to study and avert those thousand poisonous influences which beset at once an aggregation of individuals; and the physician practising in such a community would hardly know of hygiene and its laws, except as by curiosity he might read of it in the literature of the day.

He states that no report has come to him more frequently than the following:—A camp is formed in which are rapidly congregated from five hundred to a thousand men. They come in, individually hardy and robust; their bronzed countenances, brawny arms, and stalwart forms mark them as the finest type of physical development. The surgeon, perhaps excited, and it may be bewildered by the novelty of his position and duties, is surprised after a while to find that men who presented themselves only a short time previous as recruits in the full vigor of health, are attacked one after another by some zymotic agency; his little hospital is soon filled, additional accommodations are sought, and he is most assiduous in his care upon the sick. He exercises an enlightened judgment, skilful practice, and yet his sick recover slowly, the mortality is large, and the numbers on the increase. The officers and men lose confidence in him, and the mortality is pointed to as an evidence of incompetency; the surgeon was clearly at fault. It did not occur to him that the close, warm barracks, in which the men are packed closely as bees, in the construction of which but one idea has prevailed, how best to keep *out the air*, was the silent, wary poisoner of his men; that their aggregation in quarters far too limited for the number, without the least provision for ventilation, indeed with every obstacle to prevent it, the confined exhalations of the men, the want of cleanliness in persons and quarters, the change of diet, the irregular habits at once contracted; all matters which fall under his direct province, and concerning which, if he had been fully conversant, very much of his subsequent troubles would have been averted.

Or follow the men in their first essay at camp-life, From the necessities of the service they camp on a level spot, without natural drainage, in a wet season. The tents are pitched with symmetrical precision, the military arrangements seem all perfected, and yet the men suffer exceedingly, and sickness is rapidly developed in the camp. *Diarrhœa*, a word more frequently in the mouth of the soldier than any other, is prevalent. The surgeon, judicious in his mere medical prescriptions, exhausts the *ars medicinæ* in vain. Still is it persistent, still are the numbers increasing. Here again he is at fault, in the simplest rules of hygiene.

Due attention has not been given to the first requisite—the proper drainage of each tent and street; the latrines have been located indifferently, more with an eye to convenience than the absolute necessity of locality, nor has proper attention been paid to throwing on earth day by day; the garbage and refuse of the camp are not systematically carried off and destroyed; more than all, the first essays of men wholly unsophisticated in the principles of cooking, have given to the men food totally unfit and indigestible.

A very little preliminary care would have prevented all. He had but to impress upon the officers the essential need of attention to the externals of the camp, to have taken a half hour each day and instruct the detail of cooks that their method of cooking could hardly be worse, that the effort to do it speedily would entail serious consequences, and much would be remedied. It is easy to make the hardest junk or the saltest pork palatable, and to change the beans from bullets, as they are half the time served, to soft, nutritious food. If our surgeons, as a class, have come short in anything, it is in their knowledge and application of the laws of hygiene.

As physicians, they have proved themselves equal to the emergency. Most of the diseases of camp life, while severe in character, are comparatively simple in diagnosis and treatment. If the surgeon be but faithful and devoted he soon acquires the knowledge requisite for intelligent and proper treatment.

As surgeons, though they have fallen short of the standard necessary for a thorough and true performance of their duties, they have exhibited as high a standard of proficiency as the previous experience and opportunities would warrant.

Operative surgery is purely a practical art. He who becomes at all proficient must be engaged in its daily practice and be constantly exercised in its manipulation. The utmost precision in anatomical details, while of primary importance, will not alone render the operator skilful. He wants the cool head, steady hand, and confident assurance which daily exercise can alone confer. True, these are not all the qualities that constitute the true surgeon, for there is a true philosophy to the art—a philosophy which only close study, careful observation, and a ripened experience can confer. In no department of surgery is this more essential, and yet, from the very necessities of the case, are the data more conflicting—so many extraneous influences arise—influences so foreign to the patient in private practice or general hospital, that deductions derived from data gathered there are wholly irreconcilable with experience upon the field. It is but right, therefore, that proper allowance should be made for any shortcomings of our army surgeons. Special study and experience are absolutely necessary before the surgeon can perform his duty properly.

This kindly appreciation of the difficulties under which the medical staff of the volunteer army has labored, will be grateful to the individual members. Heretofore they have received only censure, and that often of the most unjust and cruel kind. We do not doubt that impartial history will be as lenient in its judgment as the late Surgeon-General.

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THE WEEK.

A Correspondent of the London *Medical Times and Gazette*, writing from the Army of the Potomac, makes the following statement in regard to the system of operating after each battle:—

"Previous to that time (battle of Antietam), it was the duty of the senior medical officer of a regiment to decide upon all the cases occurring in his command, and should his decision be operation, to operate; but the evils arising from this licence, this want of supervision, became plainly apparent, and to prevent in a great measure in future ill-timed, ill-judged, and badly-executed interference, a staff of officers in whom confidence could be placed was commissioned, in the event of a battle, to examine, decide, and operate, the duty of the others being restricted simply to dressing. That this plan works admirably the experiences of Fredericksburg, Chancellorsville, and Gettysburg have fully demonstrated. Not only do the patients receive the best Professional skill which the division can afford, but the Surgical history of the battle is better preserved. One officer in the Hospital does nothing but record in full the histories of the various cases, whereas formerly every regiment had a record to hand in, although every one did not furnish it. Some surgeons, through ignorance of the routine of military duty, and others through neglect, did not comply. It is not unusual also for papers in the field to get lost during their transmission from one official to another."

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London has been visited by an epidemic of small-pox, of great severity. It has now declined, but it has left a fearful record of its power. The *British Med. Journal* says:—

"It reached its climax in the month of May, the number of deaths for the week ending May 9th being 71, and for the four weeks ending May 30th, 268. The number of deaths for each of the four weeks of August was 49, 45, 39, and 31; the total for the four weeks being 164. For the first two weeks of September the numbers have been only 29 and 28. It is to be observed, however, that the disease is still far above its ordinary prevalence; and that the number of deaths increased considerably after the week ending July 25th, when it was only 34, and when the Registrar-General stated that there was 'reason to hope that the further spread of the small-pox in the metropolis had been checked.' Some idea as to the extent of the present epidemic may be gathered from the following facts:—"In 1861, the number of deaths from small-pox registered for the entire year was only 217; whereas the number for the first eight months of the present year has been no less than 1600."

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The Medical Colleges of this city have commenced their annual session. There is a considerable increase in the aggregate number of Students in attendance, showing a strong tendency to concentration of medical teaching in New York. As would be anticipated, the Schools that offer the best facilities for clinical instruction, attract the larger number of students. But few changes have been made in the schools during the past year. In the College of Physicians and Surgeons, Dr. Thomas has been appointed Adjunct Professor of Obstetrics; Prof. Budd takes the place of Prof. Bedford, in the University Medical College; Prof. Carnochan has retired from the N. Y. Medical College.

Reviews.

Relations of the War to Medical Science.—The Annual Address delivered before the Westchester County [N. Y.] Medical Society, June 16th, 1863, by J. Foster Jenkins, M.D., President of the Society. New York: Baillière Brothers, Publishers, 1863. pp. 16.

In this interesting address Dr. Jenkins sets forth the labors of the Sanitary Commission with great vigor and truth. As an Associate Secretary of the Commission he has had large opportunities to become familiar with all its operations, and to trace the influence of its service upon the country and upon our profession. He says:—

"The Sanitary Commission appeals strongly to the approval of medical men, in that it has so steadily, from the inception of its trust, inculcated the importance of the observance of the laws of hygiene. Recognising from the beginning of its career the great truth that preventive medicine out-ranks in importance both alleviative and restorative processes, it has steadily promulgated it, in many publications, and by the urgent voices of its medical officers. 'A Treatise on Hygiene and Therapeutics,' by two eminent members of the New York Academy of Medicine; a compilation of 'Rules for Preserving the Health of the Soldier;' a monograph containing the conclusive evidence of the prophylactic virtue of the sulphate of quinine in warding off miasmatic disease; a tract of advice on camping; another on the value of vaccination to armies—are specimens of what it has attempted through the press. These have been circulated to the extent of many thousand copies by the Commission's agents, to medical and military officers, to non-commissioned officers and privates. Meeting the requirements of its charter from the President of the United States, which constituted it a 'Commission of Inquiry and Advice in Respect to the United States Forces,' it has in all our armies set on foot a series of inquiries almost exhaustive in their range, touching the many relations of hygienic law to life in camp, in bivouac, and on the march. These pertain to the character of the camp-site; the arrangement, drainage, and cleanliness of the camp; the character, ventilation, and arrangement of the tents; the bedding and clothing of the men; their personal cleanliness; the quality and source of the water; the character and abundance of the food, and the manner of cooking it; the recreations and discipline of the men; the provision of the camp hospital; the sickness and mortality existing, or recent, etc., etc., to every condition, in short, that has an ascertained influence on the health of men in armies.

"These inquiries are made, and the facts sought for are gathered, by medical men, selected for their intelligent familiarity with the applications of hygienic laws, their tact, and their qualification for independent observation, so that their eyes and ears, and the inferior organs even of taste and smell, may correct and modify inaccurate, partial, or wilfully false statements of careless or reluctant informants."

The preparation of monographs on special subjects was an important work:—

"The Commission has called into its service, or, rather, has claimed the service for humanity, of distinguished medical scholars and writers, for the preparation of practical monographs on the diseases, or surgical injuries most liable to arise amid the vicissitudes of war. The names of Flint, and Metcalfe, and Mott, and of the present Surgeon-General of the United States army, Brigadier-General Hammond, assure you that work intrusted to such men is not feebly performed. The sixteen monographs already printed have received a wide circulation in the army, and, besides their immediate benefit, can hardly fail, in due time, of a reflex influence on public health,"

Another and perhaps still more important enterprise undertaken by the Commission was hospital inspection :—

"Another method in which the Commission is applying its resources to promote a knowledge of applied science, is by sending to each of the United States general military hospitals in the country, a surgeon or physician of recognised distinction, and wide experience in hospital management, who has had practical acquaintance with the needs and the deficiencies of hospital construction, who is familiar, as with his alphabet, with the conditions which invite disease or prolong convalescence, whether pertaining to construction and interior arrangement of the buildings, to the regimen or professional treatment of the patients, or to external circumstances, as the vicinage of swampy grounds or the neighboring nuisances of a populous suburb You receive the names of Bowditch, and Buck, and Draper, and Post, and Reid, fallen, alas! at the post of duty, as those of experts whose judgment must be influential with the chief of the medical bureau, could he avail himself of it. It was on consultation with Surgeon-General Hammond, and by his advice, that this corps was engaged, six being kept in the field, successively, east, west, and south, and their reports, or the portions of them calling for remedial action or making recommendations, are by the chief of the corps, Dr. H. G. Clark, well known as a scientific sanitarian, transmitted in confidence to him. This inspection will prove of advantage not only to the occupants of the ninety thousand beds in the hospitals thus visited, in effecting improvements in hospital architecture and management, but by the final publication of such portions of the reports as may properly be given to the public, new light may be thrown on many points of hospital economy, and fresh illustrations be supplied of the laws of sanitary science."

He thus alludes to the reform of the Medical Bureau effected principally by the Commission :—

"When the war began, the requirements of law provided that the senior surgeon of the army should be the Surgeon-General, an arrangement that was liable to result in placing at that post an officer whose chief qualification for its varied duties of large responsibility was a good constitution carefully preserved. There was no bureau of medical inspection established by law, nor any legal requirement in this corps for its maintenance. There was little incentive, aside from natural taste, considerations of pride or conscientious impulse, to professional improvement, or especially zealous devotion to duty. Promotion, being by seniority of service, could not follow as a result of high qualification, nor, after the junior officer had passed his examination for a surgeoncy at the end of five years' service, was it retarded by incompetence or sloth. The tendencies of the system repressed the promptings of professional ambition, and favored contentment in the dry path of old routine.

"It was no merit of the *system* that so many medical officers rose above its debilitating influences, and made for themselves and for their corps a reputation going far to justify, by scientific attainments, as well as by manly and honorable bearing, the designation I once heard applied to them by an officer of another staff—the '*corps d' élite* of the army.' The commission felt that such a system was inadequate to the demands of the country—that the highest talent and the most interested devotion should be given to the discharge of the multiform duties of the medical bureau. It urged its views upon the President, the Secretary of War, and upon Congress, and brought to bear on legislators, the organized sentiment of thoughtful men throughout the country. It met the objections of Prescription and Routine, and pointed out a more excellent way than ever their feet had trodden. By the influence of Public Opinion, moulded and organized and directed by the Commission, it is not too much to say, Congress, in April, 1862, passed a bill which, approved by the President, became law on the 16th of that month, and which introduced new features of the greatest value into the organization of the medical bureau.

"Besides increasing the number of officers in the lower grades, it added an Assistant Surgeon-General and a Medical Inspector-General, with the rank of colonel respectively, eight Medical Inspectors, ranking as lieutenant-colonels, and provided that these officers—as well as the Surgeon-General, who ranks as a brigadier-general—should be hereafter *selected* for merit and eminent qualification from the whole number of medical officers in service, whether of the regular or volunteer army.

"This is the first instance, so far as I am aware, in which legislation inspired the ambition of members of the medical staff, by associating their efficiency with the rewards of a laudable ambition. The assistant surgeon, ranking as lieutenant, could heretofore only expect to attain a captain's rank at the end of five years. Five to seven years more found him enjoying a surgeoncy, with a major's dignity, and there he felt that he must abide during his whole army life, as few men could rationally dream of surviving to a septuagenarian enjoyment of the only colonelcy, when he should become the senior surgeon and *so* Surgeon-General.

"A striking illustration of what was to be expected from the new law was given nine days later, when the President commissioned Assistant Surgeon William A. Hammond to be Surgeon-General of the army. It is well known, I believe, that the Sanitary Commission urged this appointment, but not on personal grounds, for only one of its members had ever seen him when their decision was reached that this would be the best appointment possible. But they presented his claims to the President and Cabinet, from his well-known devotion to science, his energy and executive ability, his comprehensive view of the great questions sure to arise in the administration of his office, and his evident readiness to meet boldly great responsibilities. His administration has justified the selection. He has introduced liberality and promptness into the purveying department of the bureau. He has greatly enlarged the supply table; has substituted for old hotels and seminaries, airy and ample hospital buildings, conformable to improved architectural models; has raised, by providing more rigid examinations, the scientific standard for admission into the army medical service; has sought legislation to enlarge the hospital fund, to improve the system of nursing, to provide for more extended inspection of camps, barracks, hospitals, transports, and stores; to establish a legalized and humane system of ambulance, and to render, by other enactments, the corps more efficient and the system more complete.

"By these efforts, by the just exercise of discipline, by his encouragement to scientific investigation, his fostering of army medical societies, his establishment of a museum of pathology, and his detail of accomplished members of the medical staff, to write the medical and surgical history of the war, he has kindled afresh, in the medical service, a zeal and an *esprit-du-corps* which can hardly fail to reach an enthusiasm noble in its aims, and, to scientific progress, fertile in result. It is barely a year since the medical bureau was fully re-organized by the President's appointment, and their confirmation by the Senate, of the corps of Medical Inspectors, the prime helpers of its Chief in securing an exact knowledge of the field before him. But the experience of this year indicates the increasing gain likely to accrue to science from this measure of reform. For, under such guidance, reform is not likely to go backward. Let us thank God and take courage."

THE annual meeting of the Vermont Medical Society was announced to be held at Montpelier on the 14th and 15th of October.

CORRECTION.—It was erroneously stated in the MEDICAL TIMES of Aug. 27th, that Dr. G. W. Varnum was in charge of the 15th Army Corps Hospital, at Vicksburg. Dr. C. McDonnel, U.S.V., organized this hospital, and has continued in charge to the present time.

PRESENTATION TO DR. W. W. STREW, U.S.V.—Dr. Strew, formerly of Oyster Bay, L. I., but now a Surgeon of Volunteers, in charge of the U.S. Army General Hospital, No. 11, Louisville, Ky., recently received from the officers of that hospital a valuable testimonial, consisting of a beautiful set of silver plate, a magnificent pitcher, two goblets, and a salver.

Correspondence.

IMPORTANCE OF PRELIMINARY EXAMINATIONS IN MEDICAL SCHOOLS.

[To the Editor of the American Medical Times.]

Sir:—Your article in the Times of August 28, touches upon a subject of vital significance to the profession. You there suggest the importance of insisting upon an examination in the primary studies at least, preparatory to admission to our medical colleges.

Now, this idea at first may strike some as exceedingly chimerical, if not unreasonable. But, if we look at the actual *status* of the majority of the students in our medical schools, and compare it with what we all feel should be the standard, both for student and practitioner, we cannot fail to see that the good of the profession cries loudly for a reform.

And first of all, it is an undeniable fact that there are fewer graduates of colleges among the students of medicine than among the members of our law schools and theological seminaries.

In looking over the catalogues of two of our most prominent schools, I found that the proportion of graduates of colleges was only about one in five—a small ratio surely, making then the exception, and not the rule. Among theological students the rule is reversed. The non-graduates are the exception, and marked as such. And among the students of law, both in schools and offices, the proportion of educated men is far greater than among the students of medicine. Moreover, it is a fact, verified by all who have had opportunities of judging, that out of the five hundred that annually step forth from our New England colleges, not one in ten enters upon the study of medicine. Such, then, being the facts, is it not evident that many of the attendants of the lectures must be deficient in the essential preparation for thorough and successful study? Let me not be understood as deifying a college diploma. A pound of brains is worth a ton of parchment. It is true that our land contains no greater dunces than many that are annually crowned with laurel and degree. But still the eternal fact stands forth that, other things being equal, the difference between one man and another is the difference of opportunity. And the remark applies with peculiar force to the medical profession. Even Dr. John Brown, in his *Horæ Subsecivæ*, while contending for the superiority of what he terms "*The With Brains*, sir," over education and culture, still asserts that a physician must be *capax* as well as *sagax*—capable of scholarship as well as sagacious in observation and discernment.

Education cannot create or confer creative power, but is an accession to that power. The physician needs genius and heart, but he needs more. He must have power of acquisition and love of labor. Unless he have the two last combined with the former, he ought never to deal with the minds, bodies, and souls of men.

Genius, combined with heart, unassisted by scholarship, may make an eloquent pulpit orator, and the history of the church glistens with bright examples. But medical biography affords no instances of any men who, by mere force of intuition alone, have become pillars or standards in science. Asclepiades, Paracelsus, and Chamberlin, the inventor of the forceps, were really brilliant men, and made startling innovations; but the fathers of medicine, Hippocrates, Galen, Sydenham, and Rush, were well-read, universally educated men. It is essentially a progressive science, and all that the most original mind can do is to add his own few mites to the accumulations of the centuries. For this reason, and then, the fact of so great a number of uneducated among our schools, there should be a system of examination on the essential preparatory studies.

It should not be such as to require the routine of a college course; but it should be such as to require careful and thorough study somehow, either alone or under instructors. Some of our ablest leaders in every department of thought and action have never seen the walls of a college, but hard and long they have toiled for themselves to complement their deficiencies of opportunity.

Again, such a system as here proposed would add dignity to the profession. At present your remark, "he is only fit to be a doctor," is only too truthful a statement of the popular expression. Ought this so to be? Viewed in its largest, highest, wholest scope, there can be no more noble profession than that of a physician. The pill and powder, the scalpel and bistoury, should be merely tools of the character behind them. The soul that lies deep within man is of more importance at the bedside than the technical knowledge of formalities. What practitioner has not noted with surprise often that remedies succeed in some hands that often fail utterly, administered by others? May not the reason of this difference of result, sometimes at least, be traced to the unconscious and impalpable moral influence that proceeds like the invisible electric current from the heart and mind through every word, look, gesture, or operation?

One thing is seen, the literary standard of our profession can be and *must be* brought up to a level with law and theology. It is already so in Germany. Yet in our land the impression remains, both among the masses and men of letters, that medicine is only a city of refuge for the renegades from every other profession, and that for an embryo-physician to devote his strength and time to miscellaneous and literary culture is to cast his rich pearls before swine. How erroneous, and yet how prevalent, is this idea! But can we blame communities for thinking thus, when a glance at our lecture rooms tells us that they must be half right in their impressions? But this is not all. Not only do uneducated men, and those whom poor scholarship or godless lives have ostracised from final graduation at our institutions of learning, feel free to enter upon the solemn pursuit of medicine; but even of those who enter with diploma in hand, very few indeed are men of the first literary ability, at least, to say nothing of their moral character. Law and theology monopolize the talent of our colleges. From extended observation I am prepared to assert that not *one in fifty* of the graduates of our New England colleges, and who become students of medicine, are men who were the intellectual leaders of their classes.

These facts all point one way. They show vividly the necessity of a thorough preliminary examination, such as you suggested, to give the profession the exalted name and place it deserves. Such a system of examination would exclude or stimulate those who hitherto have jumped from the unimproved district school to the medical lecture-room. It would exclude the worthless cast-offs of our colleges, those sapless leaves that fall to the earth, and are continually blown into our ranks. It would exclude even the diploma, if only ignorance and indolence were behind it.

May the bright day hasten when faculties shall dare to stand before the doors of their schools, armed with a clear, impartial examination, to repel the entrance of recklessness, immorality, and stupidity. And then every ambitious and intellectual youth can feel that in this most sacred calling he may find full scope for all the literary culture, all the scholarly attainments, all the familiarity with human nature, all the iron energy and wealth of feeling that give to character everywhere its power and beauty.

G. M. B.

WHAT IS HIS DINNER HOUR?

[To the Editor of the American Medical Times.]

Sir:—The following extract from a weekly religious paper is so truthful and suggestive that I beg you to insert it in the American Medical Times. It is rare to find a layman who so thoroughly understands the little annoyances to which medical men are subjected.

What question is oftenest asked of any in life? "What's his dinner hour?" Men may indeed say:-"How d'ye do?" But that is a salutation; half the time we do not care whether it is answered or not. This is a question to which we expect an answer: "Is Mr. Blank in?" "No." "Is Dr. Good at home?" "No." "What's his dinner hour?"

Now, my friend, what is the motive for asking this question? Do you expect to dine with him? Oh no—you only want to see him. If you wanted an invitation to dinner, you would take a less direct way, but you want to see him. If the servant is green enough, he will tell you his dinner hour; and so when the weary man comes home from his business or his round of practice, perhaps hurrying lest he should be late, his dinner on the table, wife and children waiting, there you lie in wait like a spider for your victim. "Just a moment, I only want five minutes' talk with you." Who ever finished a talk in five minutes? It grows to ten, he rises, another five, the family have begun their dinner, or sit waiting and indignant. What is a dinner after it has stood on the table fifteen minutes?

"Just one minute more, Doctor." If a man says one minute, always multiply it by ten. At last he gets rid of you, and he is a saint if he does not follow you with a very left-handed blessing.

"Ah!" you say, "what a stir, merely because a man's dinner is put off, just once." Yes, that's it, "just once." Why, friend, remember that what you do to-day some one else will do to-morrow, and so it becomes a thing of daily occurrence. It is no small thing to spoil a man's dinner every day, to trouble his temper; it is really a matter of health and of principle; for when a man has worked hard he needs repose, and digestion is better with a quiet mind.

And what did you want? "Oh, his help about a situation for my son," or his opinion about a certain investment; or, if he be a physician, a professional opinion? Why not go then to his office at the proper time? "Oh, he is so busy then, I always have to wait." So then the whole thing resolves itself into selfishness, you want a favor, and in addition, though you could see him at a time he fixes, you prefer to sacrifice his convenience to your own, and so you ask: "What's his dinner hour?"

"But I expect to pay him." My friend, does money pay for such annoyances, and do you give any extra compensation for loss of temper and much vexation? I never heard of it. "But my time is valuable." It may be; but a man who is really busy, and values his time and is systematic, will appreciate the convenience of others, and not trespass on their rights. Busy! what were you doing the next morning, when he was ready to see you at his office? I saw you lounge for half an hour and smoke a cigar at your leisure. You were not going to have *your* comfort disturbed, and you spent another half hour later, in very unnecessary gossip with Mr. B. at his office: I saw you; but you were in a furious hurry soon after, and all for want of those two half hours.

Oh! for the Law of Consideration. If your business be for his advantage, he has a right to choose his own time or reject it; if you want him to do you a favor, you certainly are bound to consult his convenience. What is the Golden Rule? Answering that, your next question will not be: "What's his dinner hour?"

Army Medical Intelligence.

(CIRCULAR NO. 22.)

SURGEON-GENERAL'S OFFICE,
WASHINGTON CITY, Oct. 10, 1863.

The following letter from the Provost Marshal General is published for the information of the medical officers of the army:

"WAR DEPARTMENT, PROVOST MARSHAL-GENERAL'S OFFICE,
"WASHINGTON, D. C., Oct. 9, 1863.

"COLONEL:—I have the honor to return the enclosed communication from Medical Inspector Cuyler, and beg leave to state that the surgeons in charge of hospitals are directed in Paragraph VI., General Order No. 212, to forward to this Bureau rolls of all men reported by them for transfer to Invalid Corps, after each regular muster. Immediately on the receipt of these rolls in this Bureau, the Acting Assistant Provost Marshal-General of the State in which the hospital is located, is notified to receive the men whose names are on the rolls, and assign them to companies in the battalion to which they are reported to belong by the surgeon. Should any of the men recommended by him (the surgeon) for the second battalion be needed in the hospital for nurses, cooks, etc., they will be at once assigned to such duty. Full companies can be organized in hospitals where their services are needed, and officers will be assigned to command them, and will clothe, arm, and equip the men.

"Where no companies exist in a State from which rolls are received from a surgeon, then the Provost Marshal of the State is ordered to receive the men and hold them as a nucleus for the formation of a company.

"The names of the men thus reported are published in a General Order, which completes their transfer to the corps. The necessity for subsisting the men must necessarily exist until an officer is assigned to command them, when provisions will be drawn on a regular Company Return by that officer.

"As the number of officers of the corps is limited, and by no means adequate to its requirements at present, it is confidently expected that the surgeons will accord to us that patience and forbearance which we are led to expect from the great courtesy and hearty co-operation with which they have already favored the corps.

"I am, very respectfully,
"Your obedient servant,
"JAMES B. FRY,
"Provost Marshal-General.

"COLONEL BARNES,
"Acting Surgeon-General, U.S.A."

By order of the Acting Surgeon-General:
C. H. CRANE,
Surgeon, U.S.A.

ORDERS, CHANGES, &c.

Assistant-Surgeon L. J. Comstock, 155th New York Vols., on detached duty at Harewood Hospital, Washington, D. C., has been ordered to join his regiment.

Surgeon Henry Janes, U.S.V., has been ordered to remove all the sick and wounded, able to travel, from the General Hospitals at Gettysburg, Penn., for Baltimore, Md., between the 20th inst. and 5th prox. Sick and wounded who are not fit to be removed, will be placed in charge of competent medical officers in the town of Gettysburg. Having performed this duty Surgeon Janes will report in person to the Surgeon-General.

The resignations of the following named medical officers have been accepted by the President, to take effect the days specified:—

Surgeon James W. Fitzpatrick, October 11, 1863.
Assistant-Surgeon E. Dodd, October 13, 18 3.
" F. T. Dade, October 14, 1863.
" R. J. Levis, October 14, 1863.

The commanding General, Department of the East, has been authorized to remove the sick and wounded prisoners at David's Island, New York harbor, to one of the smaller hospitals on Bedloe's Island, and to transfer the patients in hospital at Fort Schuyler to David's Island, The Fort Schuyler Hospital to be discontinued, and the buildings removed.

Assistant-Surgeon W. C. Spencer, U.S.A., has been relieved from duty in the Department of the Gulf, and will repair without delay to Washington, D. C., and relieve Assistant-Surgeon E. S. Dunster, U.S.A., now on duty in the Surgeon-General's Office.

Assistant-Surgeon E. S. Dunster, U.S.A., now on duty in the Surgeon-General's Office, on being relieved by Assistant-Surgeon W. C. Spencer, will proceed at once to West Point, N. Y., and relieve Assistant-Surgeon H. L. Sheldon, U.S.A., now on duty at the place.

Assistant-Surgeon H. L. Sheldon, U.S.A., now on duty at West Point, N. Y., on being relieved by Assistant-Surgeon E. S. Dunster, U.S.A., will report in person without delay to the Major-General commanding Department of the Gulf, for duty.

Surgeon R. H. Gilbert, U.S.V., is hereby relieved from duty with the Army of the Potomac, and will repair without delay to Philadelphia, Pa., and report in person to Surgeon John Campbell, U.S.A., Medical Director, Department of the Susquehanna, for duty.

Original Lectures.

LECTURES ON THE MORBID CONDITIONS OF THE BLOOD.

DELIVERED AT
THE BELLEVUE HOSPITAL MEDICAL COLLEGE.
PRELIMINARY TERM, SESSION OF 1863-4.

By AUSTIN FLINT, M.D.,
PROF. OF THE PRINCIPLES AND PRACTICE OF MEDICINE.

LECTURE II.

Anæmia continued.—Changes as regards the Conformation and Composition of the Globules.—Apnœa. Of the White Globules of the Blood.—Leucocythæmia.

Gentlemen:—The diagnostic criteria of anæmia are, *First*, deficiency of the normal coloration of the surface, due to the coloring principle which belongs to the hæmatine in the red globules. The defective color, or pallor, is most manifest on the face and especially the prolabia; it is also apparent on the inner surface of the mouth and on the tongue. *Second*, weakness of the vital organs, such as observation shows to be a consequence of paucity of the red globules. *Third*, more or less of the phenomena pertaining to the nervous system, which have been mentioned. *Fourth*, the presence, frequently, of obvious adequate causes, such as loss of blood, lactation, frequent child-bearing; or of the affections to the natural history of which anæmia belongs. *Fifth*, the microscopic appearance of the blood, the red globules appearing to be fewer than in health. *Sixth*, the evidence afforded by a quantitative analysis; but this is too difficult to be available for ordinary clinical purposes.

To the foregoing is to be added a physical sign which, when present, is found to be associated generally with anæmia, viz. a bellows murmur at the base of the heart and in the larger arteries, the carotid, subclavian, etc. This murmur accompanies the first or systolic sound of the heart, and is usually soft. To constitute evidence of anæmia, there must be wanting the signs of organic lesions of the heart and large vessels. In conjunction with this murmur, in certain cases, a continuous murmuring sound, sometimes musical, is heard when the stethoscope is applied over the neck, especially on the right side, due to the movement of the blood in the veins, called the venous hum, or, after the French, the *bruit de Diable*. These murmurs are distinguished from those denoting lesions, as inorganic or anæmic murmurs. They are by no means present in all cases of anæmia; in fact, they are oftener wanting than present. Their absence, therefore, affords no proof that anæmia does not exist, but, when present, they denote a blood-change into which paucity of the red globules enters.

With reference to therapeutics, anæmia constitutes a special indication for treatment when it occurs independently of other affections, or when it is associated, as a prior and causative morbid condition, with disorders of the nervous system. When it is an element of other affections, it contributes, in a greater or less degree, to their pathological effects, and claims a certain share of attention. When it exists alone or with disorders to which it has given rise, it is generally a remediable condition; but it is otherwise when associated with such affections as tuberculosis, carcinoma, Bright's disease, etc. When it is the chief condition to be met therapeutically, the first points are to ascertain and remove, if practicable, the cause or causes on which it depends. The next point is to employ measures to restore the normal quantity of red globules. These measures consist of, *first*, a nutritious alimentation, into which meat should enter largely; *second*, the use of tonics and stimulants to render the digestive functions more active; *third*, iron as a special remedy, the effect of which is often remarkable; and, *fourth*, a regimen calculated to increase the energy of the assimilative functions, consisting of exercise in the open air, recreation, etc. These different measures are, of course, to be combined. As the anæmic condition may coexist with any disease, in other words, as persons affected with anæmia may contract a variety of diseases, its existence, or otherwise, is always to be considered, and its coincidence with different diseases may modify materially their treatment. Bloodletting and other measures which tend to impoverish the blood, as a rule, are injudicious, whatever may be the disease, if it occur in an anæmic subject. And measures addressed to the anæmia may be called for in certain cases of disease, when, occurring in a person not anæmic, or plethoric, the same disease might claim measures of a quite different character.

When simple anæmia exists, and the cause producing it has ceased, as after a hæmorrhage, the reproduction of red globules under efficient measures of treatment is rapid. Robin says, after bleeding an animal largely, the return of globules may be almost observed from hour to hour. Simon states that in the case of a chlorotic girl analysis of the blood gave of globulin, in a thousand parts, 30.860, and of hæmatin 1.431. In seven weeks, during which period she had taken two ounces of the tincture of iron and sixty-four grains of the metal, the proportion of globulin had increased to 90.810, of hæmatin to 4.598. "Before she was pale and her lips colorless; now she presented really a blooming appearance." In two cases given by Andral and Gavarret the red globules were increased under the use of iron, in one case from 46 to 97 in a thousand parts in four weeks, and in the other case from 49 to 64 in three weeks. Pure anæmia, with our present knowledge of tonic and analeptic medication, affords an excellent opportunity to display the resources of medical art.

Of the manner in which the causes of anæmia, exclusive of hæmorrhage, occasion diminution of the red globules, all that can be said, with our present knowledge, is, that they generally appear to act by impairing the *liquor sanguinis*. Further than this the pathologist cannot go until the physiologist explains how the red globules are formed from the elements of the blood-plasma in health.

Anæmia is of more frequent occurrence in the female than in the male. One reason for this is, the normal proportion of red globules is somewhat larger in the male. Another reason is, of the causes giving rise to this morbid condition, several are peculiar to females, viz. menorrhagia, leucorrhœa, lactation, and child-bearing.

The foregoing morbid conditions relate to the quantity of the red globules. The question now arises, whether these bodies are not liable to changes as regards their conformation and their composition.

The red globules have a definite form and size, with a certain range of variation within the limits of health. They are circular and bi-concave, with a regular contour. In size they vary from 1-5000 to 1-3000 of an inch in diameter. Anatomists are not agreed whether they are cells or solid bodies. They are generally regarded as cells; but Robin, one of the most distinguished of the microscopists of the present time, regards them as solid bodies. When brought into contact with different substances out of the body, they are found to be readily altered in form, size, and, of necessity, in composition. They imbibe water by endosmosis, becoming swelled and globular. In some fluids they part with a portion of their water by endosmosis, becoming indented, losing their regular contour and sometimes presenting a wrinkled appearance over their whole surface. The latter changes occur when they are contained in urine. They may be witnessed under the microscope by adding a few drops of perspiration. Again, they are composed of several constituents, the more important being an albuminous substance externally, forming the cell-wall, in the opinion of those who regard them as cells, a substance within, in which resides the coloring matter, called hæmatin, iron, fatty matter, etc. Now, the form, size, and composition of these organized bodies are doubtless adapted to certain physiological ends of more or less importance in the economy. And, since they are so easily altered out of the body, it may be inferred that changes in the liquid in which they are suspended (the liquor sanguinis) must, of necessity, give rise to various alterations of their size, form, and composition. This is a rational supposition, but, in the existing state of our knowledge, pathology is wanting in ascertained facts. The effects of various reagents out of the body have been studied; but the circumstances in the living body are so widely different that we cannot infer the same effects to be produced when the same reagents are administered as remedies, or to lower animals for the sake of experiment. Indeed, experiments of injecting into the blood-vessels various substances have shown the results to be different from, and sometimes quite the reverse of, those produced by applying the same substances out of the body. Future researches may lead to discoveries which will be found to have important pathological bearings; but at present no positive conclusions are warrantable.

A morbid condition of the red globules incident to inflammation may be here noticed. These bodies appear normally to exude a viscid or sticky substance in small quantity. This causes them to adhere in rolls or piles, presenting under the microscope an appearance compared to that of rows of coin. In the morbid state of the blood which obtains in inflammation, this exudation takes place in an abnormal quantity; hence, there is a notable tendency to adhere in rows. A drop of blood under the microscope may thus furnish a diagnostic sign of inflammation.

The blood contains in health certain gases, viz. oxygen, carbonic acid, and nitrogen. The red globules are supposed to be the agents which absorb and transport these gases. Oxygen and carbonic acid are received and expelled through the medium of the lungs, the interchange of gases with the atmosphere being necessary to the perfection of the blood, and constituting the function called *hæmatosis*. When these processes are interrupted, the normal condition of the blood, as respects the gases just named, is exchanged for a morbid condition. The blood does not undergo the conversion from venous into arterial; it presents in the arteries the dark color, and essentially the composition and properties of venous blood. It is incapable of sustaining life. This morbid condition of the blood has been called *asphyxia*, a term signifying absence of pulse. A more correct term, now more frequently used, is *apnœa*, signifying deficiency of breath. Any cause impeding respiration may occasion apnœa. It is the mode of dying in the fatal cases of a considerable number of diseases.

Deficiency of oxygen is the essential feature of apnœa, giving rise to phenomena which will be considered under the head of modes of dying. An excess of oxygen in the blood is probably never an element of disease. An excess of carbonic acid obtains wherever the respiratory function is compromised, and this is an element of apnœa. It is difficult to say what pathological effects are due to an accumulation of carbonic acid, and what to deficiency of oxygen, but the latter has undoubtedly the larger amount of agency in giving rise to the phenomena of apnœa.

With our present knowledge of nitrogen in the blood nothing is to be said of its pathological relations.

Of the known morbid conditions affecting the organized or corpuscular constituents of the blood, those which relate to the red globules are the most frequent. There is but one morbid condition relating to the white or colorless globules as yet ascertained; this consists in their abnormal multiplication. The white globules are spherical bodies larger than the red globules—nearly double in size—and relatively vastly less numerous. It is estimated that in health they are in the proportion of one to every one, two, or even three hundred red globules. An important point in its pathological bearing is their resemblance to the pus globule. So closely do the two resemble each other that the most practised microscopical observers declare their inability to distinguish the one from the other. Robin and others regard them as essentially identical, and, as already stated, include both under the name of leucocytes.

For our knowledge of the morbid condition consisting in an increase of the number of the white globules, we are indebted to the microscope. The existence of such a condition was pointed out by two microscopical observers who were led to the discovery independently of each other in the same year (1845), viz. Bennett and Virchow. Virchow designated the condition *leucœmia*, a term signifying white blood. Bennett applied to it the name *leucocythemia*, signifying white blood cells. The latter is the better term, and is in common use. Both observers at first supposed the abnormal appearance of the blood to be due to the presence of pus.

A certain amount of increase in the number of white globules is not uncommon in various affections. In order to constitute leucocythemia, the increase should be considerable, amounting to a ratio of at least 1 to 20 of the red globules. Cases have been observed in which the ratio was much larger than this, amounting to an equal number of both, and the white even preponderating over the red globules. In all cases the red globules are diminished, and the relatively morbid disproportion is owing in part to this fact. In well marked cases the gross appearance of the blood undergoes a notable change. It acquires a reddish grey or a chocolate color. This is particularly observable after death, in the blood contained in the cerebral veins and sinuses.

This morbid condition of the blood is associated very constantly with enlargement of the spleen, frequently with enlargement of the liver, and in a certain proportion of cases the lymphatic glands of the neck, axilla, groin, etc., become more or less enlarged. A distinction has been made by Virchow into splenic and lymphatic leucocythemia, the former being characterized by enlargement of the spleen, and the latter by enlargement of the lymphatic glands. It is stated that the lymphatic variety is also characterized by notable augmentation of the small white bodies, called globulins; these are also increased in number, but in a less degree, in the splenic variety. A pathological connexion of some sort undoubtedly exists between the enlargement of the parts just named, and the morbid condition of the blood. What the nature of this connexion is, with our present knowledge, can only be conjectured. Bennett regards these and other ductless glands as agents for the production of the corpuscular constituents of the blood, and supposes that the red globules are, in fact, the free nuclei of the colorless globules. Hence, he concludes that leucocythemia is due to disturbances of this blood-function of the ductless glands, in consequence of which the white globules, not being transformed into the red, get into the circulation in a morbidly increased quantity. According to Bennett, disease of the thymus, thyroid, and supra-renal bodies may give rise to leucocythemia, these, together with the pituitary and pineal glands, being, in his view, concerned in the production of the blood globules. These views are at present to be received as hypothetical. It is to be remarked that enlargement of the spleen and lymphatic glands occurs frequently without leucocythemia; while the latter never occurs without the former. It would seem, therefore, that if they sustain to each other the relation of cause and effect, the leucocythemia is the effect rather than the cause. Both, however, may be concomitant effects of a pathological condition as yet unknown.

Patients affected with leucocythemia are, as already stated, anæmic. They present the pallor of anæmia, together with the phenomena symptomatic of that condition. Febrile movement characterizes certain cases, and in these cases the vital forces are rapidly enfeebled, and death takes place by exhaustion. Diarrhœa is apt to occur in this class of cases. Other cases are characterized by hæmorrhages occurring from the nasal passages or in other situations, and these may be sufficiently profuse to prove the immediate cause of death. Dyspnœa, independently of any appreciable lesions of the chest, has been observed. Diminution of the vital forces, progressing more or less rapidly, belongs to the history of this condition, ending fatally sooner or later. It is doubtful if recovery ever takes place in cases in which the condition is well marked. The average duration before a fatal result, is estimated by Trousseau to be about thirteen or fourteen months.

This condition may be suspected when the appearance and other phenomena of anæmia are associated with considerable enlargement of the spleen or lymphatic glands. It is, however, to be borne in mind, that anæmia may occur under these circumstances without leucocythemia. Enlargement of the spleen, as is well known, occurs in a certain proportion of cases as a sequel of intermitting fever, and anæmia generally coexists; but observation shows that leucocythemia is developed very rarely in these cases. The diagnostic criterion is the evidence of the augmented number of white globules, afforded by microscopical examination of the blood. Several specimens should be examined under the microscope, and it is to be recollected that to constitute leucocythemia the proportion of white to red globules should at least be as great as 1 to 20.

The question arises, whether there are sufficient grounds to consider this morbid condition as constituting a special disease, or whether it is to be regarded as merely incidental to other affections. That it is a morbid condition of grave import, is certain; but how much importance belongs to it *per se* is uncertain. With our present knowledge we are not warranted in considering it as more than a pathological element of a cachexia, the essential nature of which remains to be determined. The pathologist may expect to be able to understand more fully the nature of this morbid condition, when physiologists have established the source and the functions of the white globules of the blood. Robin remarks that leucocythemia is a return to the fœtal state as regards the predominance of these bodies, they being much more abundant in embryonic life, and that this fact affiliates this morbid condition with certain morbid growths characterized by a hypergenesis of anatomical elements which are more abundant in the fœtus.

A third constituent of the blood, belonging to the class of corpuscular elements, is called, after Donné, globulins. These minute spherical bodies, found also in chyle and in the liquid contained in the lymphatic vessels, are notably increased in certain cases of leucocythemia. This single fact is all that is at present known respecting them as entering into morbid conditions.

M. Seguin denies that marriages of consanguinity have necessarily a tendency to produce diseased offspring. He relates the results of ten marriages which have occurred between his own family and the family of Montgolfier. Eight of these marriages were between cousins-german, and two between uncles and nieces. Between 1812 and 1858, sixty-one children have issued from these unions, of whom forty-six are alive. No case of deaf-and-dumbness, of hydrocephalus, of stuttering, or of six fingers on the hand, has been observed among them. M. Seguin concludes that, when there exists any constitutional tendency to disease in a family, the tendency to its development is increased in the offspring by consanguineous marriage; but that, in alliances between members of a family endowed with a good constitution, there will be augmentation of the vital forces in the offspring. This is, in fact, just what is observed in animals whose breed is improved by man. M. Flourens remarked on the subject, that it is always well to study long before publishing, and that nothing has hitherto been advanced on the subject of consanguineous marriages worthy a serious consideration.—*Brit. Jour.*

Original Communications.

A FEW REMARKS ON ASTIGMATISM,

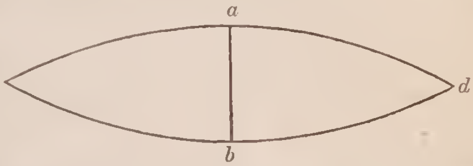
ILLUSTRATED BY A CASE.

By F. J. BUMSTEAD, M.D.,

SURGEON TO THE NEW YORK EYE INFIRMARY.

I do not propose to write a complete essay on astigmatism. As the term, however, may be new to some of the readers of the Times, a few words in explanation of its meaning may be desirable.

The surface of an ordinary double convex lens may be supposed to be formed by the revolution of the plane figure *abcd* about its axis *ab*; and hence the curvatures of all its sections are equal. This is, indeed, essential to make such a lens a useful optical instrument; for suppose the curvature of one section to be greater or less than that of another—in other words, suppose the optician to have ground the two surfaces of the lens unevenly—no clear and distinct image of any object can be obtained through it, because the rays of light striking upon different portions will be unequally refracted, and will fail to come to a focus and form an image in the same plane.



Now simply substitute the word *cornea* for the word *lens* in the above remarks, and you have an explanation of astigmatism. A typical cornea, one of the refracting media of the eye, may also be regarded as a surface of revolution with the curvatures of all its sections equal;* hence rays of light proceeding from a luminous point and striking upon various parts of its surface are equally refracted, and passing through the other dioptric media of the eye, are brought to a focus at one point within the globe. But in the astigmatic eye nature has not ground the cornea in an equal manner; its curves vary to a greater or less degree; thin sections cut in various directions and placed one upon another will be found, if critically examined, not to correspond. Hence rays of light proceeding from a luminous point and passing through such a cornea, are not brought to a focus at a single point within the globe, but each distinct place of refraction has its own focus; and hence the origin of the name (probably not the best that might have been chosen) from *a* privative and *stigma*, a point, signifying without a point or focus within the eye to which rays of light converge.

Nature preserves a certain regularity even in the irregularity we are now considering. She does not select at random one of the infinite number of planes which may be supposed to pass through the antero-posterior axis of the eye, as the one which shall present a curve greater or less than the normal curve of the cornea; but it is commonly either the vertical or the horizontal plane, or one nearly approaching them, which is thus defective. Suppose it to be the former, or vertical plane, and suppose also that the curve of the cornea in this plane is too convex; then the rays of light entering the eye in this plane will be too strongly refracted, and will come to a focus in front of those rays which enter in the horizontal plane (supposed to possess the normal curve): in other words, the patient will be myopic in the vertical meridian of his eye, although his sight is normal in the horizontal meridian; and when looking at a distant object, he will see its lateral edges distinctly while its upper and lower edges will be blurred. Again, instead of being too convex the curve in the same plane may be too flat, when the rays of light in the vertical meridian will come to a focus behind those of the horizontal meridian, and the patient will be hyperopic in the vertical plane; or, again, the vertical meridian may be normal while the horizontal meridian is either myopic or hyperopic; while, still again, both the vertical and the horizontal meridian may vary from the normal type, both being either myopic or hyperopic, but each to a different degree, or the one may be myopic and the other hyperopic. Thus it will be seen that the term astigmatism, although always applied to a variation in the refractive power of the eye in different planes, may include a considerable variety of pathological conditions.

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* Strictly speaking, the normal cornea is not a surface of revolution, since the curve of the horizontal plane is usually less than that of the vertical; but the difference is only regarded as a disease when it exceeds ordinary limits and is capable of being corrected by cylindrical glasses. In this paper, which is intended to be purely elementary, normal astigmatism may be ignored.

An excellent history of our knowledge of astigmatism may be found in the well known volume of Dr. Mackenzie upon diseases of the eye. The disease was first discovered by Mr. Thomas Young in 1801; a remarkable instance of it in his own person was reported by Mr. Airy, Astronomer Royal, in 1827; a few other cases were also brought to light by various observers; but neither the frequency, the symptoms, nor the treatment of the disease were fully appreciated until the publication, in 1862, of Prof. Donders's work, entitled "Astigmatismus und Cylindrische Glaeser." With regard to its frequency, Prof. Donders states that he has met with it on an average in one out of every thirty eyes that he has examined. The symptoms of this disease and the means of diagnosis will appear in the report of the following case:—

Mr. L. F., aged 38, a lawyer by profession, applied to me May 3, 1863, for "dimness of vision," which had troubled him for the last twenty years. He had been under the care of several surgeons who had treated him for "amaurosis" or "asthenopia." His own account of his symptoms was obscure and unsatisfactory, and amounted to this:—that he could not see well, especially after mental excitement or bodily fatigue; that, for instance, when trying a case in court, or after a late supper or excessive smoking, he found it extremely difficult to use his eyes; and that he had tried many kinds of glasses without benefit. Nor did the ordinary methods of examination afford any better clue to the nature of his disease. I found on trial that he could read No. 20 of Dyer's tables at twenty feet. His power of accommodation was normal for his age. There was no insufficiency of the internal recti, nor any defect in the other muscular apparatus of the eye. Upon examination with the ophthalmoscope, the fundus oculi and dioptric media appeared to be perfectly healthy.

Although puzzled for a moment at this result of my examination, the thought soon occurred to me that this might be a case of astigmatism, and I proceeded to question my patient more closely with regard to his symptoms. I asked him if, in looking at an object, he ever saw one portion of its outline more distinctly than another. He replied yes; that in walking through the street at night and looking at a lighted window, the upper and lower edges appeared blurred while the lateral edges were distinct. Again, in looking at a sign across the street, there appeared a second series of letters fainter than the true image and overlapping the latter above and below, and he had observed that this was the case whether one or both eyes were open. This indistinctness of the outline of objects in a vertical direction never entirely disappears, but varies greatly according to the condition of his nervous system. Under ordinary circumstances, it is noticed only when looking at objects which present a marked contrast in color or brightness, as the lighted window and gilt letters upon a black sign, just mentioned; but let him be fatigued or excited, and the dimness appears to affect all objects—even the figures upon the carpet, the ordinary type of a book, or newspaper, etc.

Taking up Snellen's tables of test type, and selecting the one in which the letters are white upon a black ground, I now requested the patient to describe their appearance. He voluntarily placed himself at a distance of about eighteen feet, and looking at the capital C of No. 100, told me that he saw a second image overlapping in a vertical direction the true image and with its upper edge about half an inch above the latter; also, when regarding the smaller letters of No. 20, he saw a complete reduplication of the figures projected upon the black ground above. In both instances the lateral margins of the letters remained distinct, and the effect was the same if either eye was closed. Having cut a narrow slit in a card, I placed the fissure in a horizontal direction before one eye, the opposite being shut, when the patient immediately exclaimed that the indistinctness of outline had disappeared; but on the contrary, it was heightened, when the position of the fissure was changed to vertical. Other similar tests were also applied. For instance, the holes in an ordinary catheter gauge held before an argand burner appeared to the patient not as circles, but as ovals with their longer axes vertical, and this direction was changed to the horizontal if he inclined his head to a right angle with the axis of his body; moreover, the normal circular image was brought out by looking through a slit in a card in the manner above described.

It was now evident that my supposition was correct, and that there was a defect in the refractive power of the eye confined to the vertical meridian; it remained to discover in what this defect consisted, whether myopia or hyperopia, and also its degree. For this purpose I placed him under such conditions as would render the indistinct vision most marked, viz. with the slit in the card in a vertical direction so as to cut off the horizontal rays; and trying various glasses both convex and concave, I soon ascertained that several of the latter diminished, and that a double concave glass of 30-inch virtual focus completely removed the difficulty. My patient was, therefore, myopic to the extent of 1-30 in the vertical meridian of each eye, while his vision was normal in the horizontal plane.

In a second examintion with the ophthalmoscope I observed a phenomenon which previously escaped me. If an astigmatic eye, owing to the defective refraction of its media, sees a circle as an oval, a circle at the fundus of an astigmatic eye should appear oval when seen by a normal eye, since the rays of light undergo the same refraction in passing from, as when entering, the organ of vision. Such a test is to be found in the circular outline of the optic nerve entrance. This test of astigmatism was first pointed out at the Ophthalmic Congress at Heidelberg, in 1861, by Dr. Knapp, who showed that in examining by the upright image the diameter of the optic nerve entrance appears longest in the meridian of the greatest curvature of the cornea, and shortest in the meridian of least curvature; while the contrary is true, when the reversed image is employed—a statement which I was able to verify in the case of Mr. F—.

Astigmatism is relieved by the use of cylindrical glasses—lenses, the surfaces of which are cylindrical instead of spherical, and which therefore refract in one meridian only. In the present case, double concave cylindrical glasses of 30-inch virtual focus, with the axes of the cylinders horizontal, completely removed the defect of vision. When the use of glasses was first suggested to Mr. F., he did not hesitate to express his belief that they could be of no benefit to him whatever; but after a moment's trial he was convinced of the contrary, and expressed his delight with almost childlike exuberance of joy at the relief which they afforded.

Cylindrical glasses cannot at present be made in this country, or at least in New York, to which my knowledge in this respect is confined; but they may readily be procured of Messrs. Paetz and Flohr, of Berlin, or of Natchez et fils, Paris. A complete set should be included in the armamentarium of any one who makes a specialty of eye diseases.

The defect in the conformation of the cornea upon which astigmatism depends, is congenital. I explain the fact that in the present instance it did not annoy the patient until about the age of eighteen, upon the supposition either that it passed unnoticed, or that, like hyperopia, it was compensated for by the high degree of accommodation of early life. The latter explanation is supported by the influence of mental excitement and bodily fatigue in aggravating the annoyance which the disease occasioned.

POISONING BY STRYCHNIA.

By W. D. BUCK, M.D.

OF MANCHESTER, N. H.

The criminal use of strychnia is of recent date; but cases of murder by it are getting to be frequent, and the phenomena have not always been carefully observed, or, if so, have not been reported.

A case occurred in this city last January, a report of which may add something to our knowledge of the symptoms and post-mortem appearances. On the 16th, about 11 A.M., Dr. Caldwell was called to Mary Ann Gibney, Irish, unmarried, six months advanced in pregnancy. She was lying on a bed upon her back, and to the left, jaws closed, forearms flexed across the chest, fingers clenched. The legs were not carefully observed. During the spasms she uttered screams. In the interim she conversed, was conscious of approaching death, and attempted to swallow medicine, but most of it would be forced back. She lived about thirty minutes, and died in a spasm. There was no period of flaccidity after death, rigor mortis being continuous with the last spasm.

Coroner Rowell saw the body soon after death, and testified that it was arched (opisthotonos). I saw her at half-past three, four hours after death. The body was warm, temperature of the atmosphere 53°. The face was livid, eyes open, pupils natural, jaws firmly closed, lips slightly parted, frothy matter escaping from the mouth; muscles of the neck relaxed; arms rigid, elbows flexed at right angles, forearms across the chest, fingers semi-flexed, and when forcibly extended would fly back; the same with the elbow; the legs were rigidly extended, feet extended and arched, great toes drawn in.

Saw the body at 6 P.M.; bloody, frothy matter escaping from the mouth; in other respects, the same.

At 9 o'clock, Dr. Wheet saw her at my request. No material change.

Autopsy at 8 A.M. *the* 17*th, twenty-one and a half hours after death.* Temperature of the atmosphere 168; body cold, face livid, jaws rigidly closed; the neck, back, left arm, right shoulder, and hip-joints were relaxed. Other parts rigid, and in the same position as the day before, manifesting the same tendency to fly back when forcibly extended. On sawing through the cranium, a large quantity of blood escaped from the cavity, probably from the sinuses and vessels of the head and neck; membranes congested; brain and spinal marrow healthy; the lungs, lining membrane of the trachea, and muscles in front of the neck were congested; the heart was firmly contracted, ventricles empty, very little blood in the auricles. Abdominal viscera healthy externally; stomach nearly empty, containing about half an ounce of a greyish, starchy substance. The mucous membrane of the cardiac extremity congested; the remaining portion was covered with a substance similar in appearance to the contents, and could not easily be removed; the mucous membrane of the small intestine was pale; liver, kidneys, and spleen, healthy; uterus contained a six months' fœtus. A portion of the abdominal viscera was examined by Dr. A. A. Hays, of Boston, and found to contain strychnia in sufficient quantity to produce death.

There are two or three points in this case worthy of notice:—1st. The early disappearance of the rigor mortis in certain parts of the body, the neck being relaxed four hours after death, and, notwithstanding the morning of the 17th was cold, the back, left arm, right shoulder, and hip-joints, were relaxed 21½ hours after death. 2d. The empty condition of the stomach; either it had received nothing just previous to death, or its contents had been thrown out by spasmodic action. That the latter may take place, I am satisfied, having witnessed it in a young man several years since, who took strychnia for the purpose of commiting suicide. During the spasms the contents of the stomach were ejected from the mouth, between the teeth, with sufficient force to reach the ceiling.

3d. The point which I wish to notice more particularly, is the tendency of the limbs to fly back when forcibly extended. It was noticed by Mary Keeley, who laid out the body of Cook. Also by the person who laid out the body of Healy, who was poisoned by strychnia in Auburn, N. H., three or four years ago. Is there any other mode of death where the rigor mortis exhibits this phenomena?

I have seen muscular action after death by cholera, previous to rigor mortis, but never witnessed anything like what occurred in the case of Mary Ann Gibney.

MANCHESTER, N. H., Sept. 25, 1863.

ROYAL FREE HOSPITAL.—Dr. Henry Bennet has resigned the office of Physician-Accoucheur to the Royal Free Hospital. His resignation was received and accepted at the meeting of the Hospital Board on the first of October, and the secretary was requested to convey to Dr. Bennet the compliments of the Board, and their sincere wishes for the complete recovery of his health.—*Lancet.*

HOSPITAL GANGRENE,

WITH A TABULAR STATEMENT OF THIRTY-THREE CASES.

By FRANK H. HAMILTON, Jr., M.D.,

ASSIST.-SURG. U.S.A., M'DOUGAL GEN. HOSP., FORT SCHUYLER, N.Y.

The following is a tabular statement of thirty-three cases of hospital gangrene which occurred at the McDougal General Hospital, Fort Schuyler, N.Y., within the last two months. I have thought that inasmuch as the subject of bromine in hospital gangrene is now being discussed pretty actively by the profession, these tables might be of some value to those interested in the subject. An analysis of the tables elicits the following facts, viz.

Whole number of cases treated, 33.

Of these but two were attended with fatal results, and these some days after the gangrene had been arrested. I refer to the cases Nos. 29 and 30. In the former, the patient died from exhaustion, the result of extensive suppuration in the knee-joint, the wound having been in perfectly healthy condition for several days. In the latter case the patient died from dysentery, his wound having put on a healthy action two weeks before his decease.

In one case, viz. No. 4, where nitric acid was used, the disease was not arrested, and at the end of ten days it was found necessary to amputate the leg above the knee. The stump healed by the first intention. Looking at the tablo again, and analysing it, it will be seen that the average duration of all the cases under all treatments amounts to 12.1515 days.

Number treated with nitric acid,	18.
Average duration of disease,	16 days.
Number treated with sol. bromine,	14.
Average duration,	6.6428 days.
Number treated with iodine,	1.
Average duration,	7 days.

The cases were under the care of Drs. Caldwell, Peck, Graves, and myself, respectively, and the sanitary surroundings were as nearly similar as could be possible. We were all agreed upon the constitutional treatment, which consisted in good diet, whiskey, and iron. The figures show strongly in favor of the use of bromine.

No.	Name.	Age.	When Admitted.	When Wounded.	Part of Body.	Flesh or Bone Injured.	Missile.	Surgeon.	Previous Condition of Wound and Health.	Cause of Gangrene.	Treatment.	Result.	Remarks.
1	E. B. George..........	20	Aug. 6	July 18, '63	Right Leg.	Flesh.	M. Ball.	Dr. J. J. Caldwell.	Good.	Infection.	Nitric acid, locally; yeast and charcoal poultices, tonics, stimulants.	Arrested in 13 days.	These cases were treated by Act. Asst.-Surgeon J. J. Caldwell, U.S.A. In this case the disease was not arrested until both tibials had been attacked, and amputation was performed above the knee, Sept. 10, 1863. Stump healed by first intention. No. of cases treated by Dr. C., 10—one not arrested. Average duration=187÷9=20.7-9 days. Dr. C. used pure nitric acid locally, in conjunction with yeast and charcoal poultices. Constitutional treatment consisted in administering tinct. ferr. muriat. with six oz. whiskey per diem, and nourishing diet.
2	A. Hollands...........	25	" 14	" " "	Left "	"	"	"	"	"	"	" " 15 "	
3	Anthony Collins......	26	April 22		" "	"	"	"	"	"	"	" " 10 "	
4	G. W. McComber......	20	Aug. 12	July 18, '63	" "	"	"	"	Poor.	"	"	Sloughing of anterior and posterior tibials.	
5	F. M. Hill	22	"	" 1, "	Right Foot.	"	"	"	Good.	"	"	Arrested in 43 days.	
6	C. J. Curtis...........	25	"	" 8, "	Left Thigh.	"	"	"	"	"	"	" " 35 "	
7	P. Murphy............	21	" 6	" 3, "	" "	"	"	"	"	"	"	" " 34 "	
8	H. Ryan........	30	" 12	" 1, "	Right "	"	"	"	"	"	"	" " 6 "	
9	W. Webber...........	21	" 12	" 1, "	" "	"	"	"	"	"	"	" " 25 "	
10	Edward Hayes........	24	" 12	Dec. 12 '62	Right Leg.	"	"	"	Poor.	"	"	" " 6 "	
11	W. H. Monroe........	22	July 10	No Wound.	" "	"	"	Dr. L. Graves.	Chron. Ulcer.	"	Sol. bromine and yeast.	" " 6 "	These cases were treated by Acting Asst.-Surg. Lewis Graves, U.S.A. Dr. G. uses a solution of bromine, containing of bromine, f ʒj, aquæ, ℥ viij., applied with a camel's hair pencil, followed by applications of lint saturated with yeast. In all these cases but that of Anderson nitric acid had been used without effect before coming under his care. Gives tonics and stimulants. He has always observed that the patient complains of headache, slight fever, and exhibits a furred tongue two or three days before the wound looks badly. Total No. of cases, 9. Average duration=60÷9=$6\frac{2}{3}$ days.
12	Daniel Anderson	18	" 15	July 2, '62	Left Thigh.	"	"	"	Good.	"	"	" " 2 "	
13	Jno. Barbrick..........	27	" 15	" 1, "	" Leg.	"	Shell.	"	"	"	"	" " 2 "	
14	Thomas King..........	23	" 15	" 1, "	" "	"	M. Ball.	"	"	"	"	" " 7 "	
15	Jno. Wobert..........	30	" 15	" 1, "	" "	"	Splinter.	"	"	"	"	" " 5 "	
16	O'Brien	28	" 15	" 3, "	" "	"	Ball.	"	"	"	"	" " 10 "	
17	Wallace Boskin........	19	" 15	" 2, "	Right "	"	M. Ball.	"	"	"	"	" " 10 "	
18	Abd. Holbrook........	34	" 15	" 1, "	" "	"	"	"	"	"	"	" " 8 "	
19	Geo. Gilford...........	19	" 18	" 2, "	" "	"	"	"	"	"	"	" " 10 "	
20	Jno. Bomereb.........	20	" 18	" 2, "	" "	"	Ball.	F. H. Hamilton, Jr.	"	"	1st, iodine; 2d, nit. acid; 3d, bromine.	" " 15 "	In the first case had bromine been used earlier, I believe the disease would have been arrested much sooner. The solution of bromine used was the same as that used by Dr. Graves. Average duration=25÷4=$6\frac{1}{4}$ days.
21	Gleason...............	19			Left "	Tibia.	"	"	"	"	Sol. bromine and poultice.	" " 4 "	
22	Henry Rose...........	23	" 15	July 8, '62	Right "	"	"	"	"	"	"	" " 3 "	
23	J. E. McCartney......	20	Aug. 12	" 18, "	Rt. & Lt. "	"	"	"	Poor.	"	"	" " 4 "	
24	R. R. Cotton..........	38	July 15	" 2, "	Left Thigh.	Flesh.	"	O. W. Peck.	Good.	"	Nitric acid and poultice.	" " 15 "	These cases were treated by Acting Asst.-Surg. O. W. Peck, U.S.A. No. of cases treated with nit. acid, 8; " " " " " iodine, 1; " " " " " bromine, 1; Av. duration with nit. acid $12\frac{5}{8}$ days. " " " Iodine 10 " " " " Bromine 7 " *In this case the gangrene was arrested in twenty days, but he subsequently died of exhaustion, from extensive suppuration in the knee-joint. The case that was treated with everything *but* bromine. is included in the average treated by nitric acid, inasmuch as this was the main remedy used. † This was a case where the disease attacked an unbroken surface.
25	Jno. Burke............	45	" 15	" 1, "	Right Leg.	"	"	"	"	"	"	" " 10 "	
26	Daniel Skinner.......	44	" 28	" 2, "	" Clavicle.	Bone.	Brick.	"	"	"	"	" " 9 "	
27	F. Oorr...............	35	" 15	" 2, "	Left Leg.	Flesh.	Ball.	"	"	"	Tinct. iodine.	" " 10 "	
28	G. W. Manning.......	22	" 15	" 2, "	" Thigh.	"	Ball.	"	"	"	Nit. acid.	" " 7 "	
29	Peter Carl*	23	" 15	" 2, "	Right "	"	"	"	Poor.	"	Everything *but* bromine.	" " 20 "	
30	W. Harrington	31	" 15	" 2, "	Left Ankle.	Bone.	"	"	"	"	Nit. acid.	" " 22 "	
31	L. D. Oliver..........	17	" 15	" 2, "	" Thigh.	Flesh.	"	"	Good.	"	"	" " 12 "	
32	R. W. Washburn.....	26	" 15	" 2, "	Nates.	"	"	"	"	"	"	" " 6 "	
33	Michael Saloist†.......	27	Oct. 7					"	Poor.		Bromine.	" " 7 "	

REMARKS ON CYANOSIS.

BEING A REPLY TO DR. JACOBI.

By J. LEWIS SMITH, M.D.,

PHYSICIAN TO THE ORPHAN HOME AND ASYLUM, LECTURER IN THE UNIVERSITY MEDICAL COLLEGE.

I was not aware of the nature of the criticisms of my paper on cyanosis made before the Academy of Medicine, till the recent appearance of the Bulletin of this Society, and as some of these criticisms seem to me to relate to points of importance, it is proper that I should take notice of them. And this I shall do with much esteem for my criticizer, as a personal friend, and with a proper appreciation of the zeal and intelligence with which he prosecutes the study of diseases of children. And at the outset let me say that much confusion can be avoided by bearing in mind my definition of cyanosis. I have stated in my paper, that I apply this term only to those cases in which the blood, both in the arteries and veins, is venous, in consequence of some permanent abnormal state in the economy, and therefore continuing venous till the close of life, and that this abnormal state has been found to be in the heart, or great vessels, or rarely, the lungs. Of course, the temporary venous state, occurring in diseases, as in croup or pneumonia, I would consider only a feature or result of the disease which causes it, and not a disease *per se*.

Now, is cyanosis, according to my definition, a disease proper, or only a feature of disease? To answer this question we must first decide in reference to another, namely, whether the serious affection of any system, as the nervous or circulatory, accompanied by marked symptoms, but caused by a local ailment or defect, which is productive of few direct symptoms, and is not in itself serious, is to be considered a disease, or only a symptom or feature of the local ailment or defect. Take, for example, tetanus, which is very analogous to cyanosis. Is the affection of the nervous system in tetanus to be considered a disease *per se* or only a "symptom" of the wound? It is obvious that it should be considered a disease, because the wound, although acting as cause, soon becomes a subordinate matter to the affection of the nerves. The symptoms and the danger arise chiefly from the state of the nerves, and not directly from the wound. And so in case of cyanosis, the signs and symptoms, such as the coldness, the emaciation, or stunted growth, the feeble development of the sexual functions, the lividity, the abnormal development of the fingers and toes, spring chiefly from the state of the blood, and not directly from the malformation. In other words, the symptoms and signs arising directly from the malformation, are subordinate to those arising from the venous state of the blood, and therefore I hold that this venous state should be considered a disease *per se*.

The view which I have expressed, is certainly in consonance with the opinion of the best pathologists, as shown in reference to other diseases. If a patient has a decided icteric hue, due to slight duodenitis, or perhaps to a torpid state of the liver, unaccompanied by pain or tenderness, the best authorities do not hesitate to call the disease jaundice. Or if there is decided pallor from imperfect assimilation of the food, they call the disease chlorosis; and if blood loaded with bile, or blood deficient in red corpuscles, is a disease, why is not blood loaded with carbonaceous products, and deficient in oxygen?

An attempt is made in the criticism to show that leucocythemia, which is an affection analogous to cyanosis, is not a disease *per se*, and doubtless it will be admitted that if leucocythemia is a disease, then also is cyanosis. Now, let me remind the reader, that the discoverer of leucocythemia, who is second to no one in Great Britain as a pathologist, has always considered leucocythemia a disease, and repeatedly speaks of it as such, although he discards the idea of Virchow, that it consists of two varieties: the splenic and lymphatic.

A little further on in the criticism is found the expression, "* * the attempt on the part of Dr. Smith, to prove that cyanosis is a new disease, is only an evidence of a retrograde movement in medicine." This remark I do not understand. It is distinctly stated in my paper, that physicians began to give attention to cyanosis as far back as the time of Boerhaave and Vieussens, and that Morgagni, more than a century ago, broached a theory in explanation of it, which still has many adherents.

As to the idea that the malformations which produce cyanosis are caused by myocarditis, occurring at an early period of fœtal life, it is only necessary to go a little into the study of the malformations to see that this explanation is unsatisfactory. For in the most common malformation, that in which the pulmonary artery is in fault, there is a certain proportion of cases in which it is obvious that myocarditis cannot be the cause of the anatomical defect. We refer to those cases in which the pulmonary artery is absent. No amount of inflammation of the heart could cause the absence of this vessel, especially as the latter, or rather the common arterial trunk, which afterwards becomes the aorta and pulmonary artery, is formed before the heart. And is it not probable that the non-development and the imperfect development are due to the same cause, whatever that may be? If so, the inflammatory doctrine cannot be received as a sufficient explanation, in a large proportion of cases, in the most common malformation. Again, the inflammatory doctrine evidently does not afford sufficient explanation for those cases in which the malformation is not obstructive, as, for example, those in which the defect consists in transposition of the aorta and pulmonary artery. Still, it must be conceded that there is reason to believe that inflammation affecting the lining membrane of the heart may be the cause of those obstructive malformations in which there is adhesion of the valves, or in which an adventitious membrane stretches across the mouth of the pulmonary artery.

I have not stated in my paper, and do not now say, that the maternal emotions are, in any case, the cause of the malformation, although the mother sometimes expresses this opinion. Certainly they are not, when experienced as late as the fourth or fifth month of utero-gestation, since the growth of the heart is then too far advanced. And yet, why may not the opinion of mothers sometimes be correct; why may not the maternal emotions, at an early period of fœtal life, be a remote cause, even if the malformation is due to myocarditis, since there would, of necessity, be a cause antedating the inflammatory action? But this is a subject about which much may be conjectured, but little can be known with certainty.

I desire to call attention particularly to the important part of the criticism, namely, the objection to my theory that *cyanosis is due to vices or defects in the organism, usually congenital, which prevent the free and regular flow of blood to, through, or from, the lungs.* A case is narrated, in which the bronchial arteries were much enlarged, so as to afford a free flow of blood to the lungs as a compensation for a defective pulmonary artery, and yet intense cyanosis was present. Who does not see that, in order to make the argument good, the bronchial arteries should arise from the pulmonary, or at least from the right ventricle, instead of from the aorta? for only then could the bronchial arteries, however much enlarged, answer the purpose of the pulmonary artery. For, consider, in the case cited, as the bronchial arteries were in their normal situation, they must have given passage to the lungs of a mixed current, namely, the blood which had just returned from the lungs, to the left auricle and ventricle, and was already arterialized, and also the blood which had returned to the right ventricle from the system. A portion of the blood, then, which entered the bronchial arteries, passed directly from the lungs to the heart, and then back to the lungs, to the exclusion from these arteries of the same amount of venous blood, which the wants of the system required to be arterialized. There was far from being a "free and regular flow of blood to the lungs" in this case, although quite likely the whole amount of blood flowing to these organs was as great as in the normal state of the circulation, and if as great, the large size of the pulmonary veins is accounted for. It is evident that this case, instead of conflicting with, tends to corroborate my theory. I wish it to be understood, however, that I believe that these enlarged bronchial arteries served as a partial compensation, as in cases No. 75, 117, and 150, in my paper; and probably they would have afforded complete compensation, and there could have been no cyanosis, had they arisen directly or indirectly from the right ventricle.

The argument in the criticism concludes as follows: "Thus, the theory of Dr. Smith is inconsistent with true pathology, for two reasons: firstly, because there are cases of cyanosis which evidently have other and distinct causes, and secondly, because in many cases in which the anatomical condition required by his theory is present, there is no cyanosis."

Now, I hold that the first of these assertions is not true, and that the second, though true, is not an objection to my theory. I have not yet met the description of any case of cyanosis, according to my definition of the term, in which there was a "free and regular flow of blood to, through, or from the lungs." Certainly the case which has been cited as an example does not, as we have seen, bear the test of examination.

As to the second assertion, that there may be malformations which prevent the "free and regular flow of blood to, through, or from the lungs," without producing cyanosis, this is a fact which is treated of at length in my paper. Many cyanotic patients have, in the early period of their lives, been free from the disease, till it was developed by some exciting cause, and yet, during the period of exemption, the anatomical defect was present which finally produced cyanosis. Now, it is wrong to argue that, because there is obstruction or irregularity of the pulmonary circulation during the period of exemption, therefore the obstruction or irregularity is not the cause of the subsequent cyanosis. For, who does not see that by the same argument the malformation itself must be excluded as the cause of cyanosis, since it is present during the period of exemption? Take, for instance, case 147 in my paper. In this patient the aorta and pulmonary artery were transposed, and yet there was no cyanosis till the age of ten weeks. Here the anatomical condition required by my theory was present, but if, because it was present during these ten weeks of exemption, we say it was not the cause of the cyanosis, we must also say that the transposition was not the cause. The second objection, then, to my theory can have no weight.

Death of Dr. George Hayward.—While the meeting of the Councillors of the Massachusetts Medical Society was in session yesterday, Dr. John Jeffries announced the sudden decease, within an hour, of Dr. George Hayward, of this city, by apoplexy. The abruptness of this announcement produced a profound impression upon the gentlemen present, many of whom were among Dr. Hayward's old friends and associates. A committee was at once appointed to recommend some action on the part of the Councillors in view of this sad event. After consultation, the committee reported as follows:

The committee appointed to consider what order should be taken in relation to the announcement just made by Dr. Jeffries of the sudden death, since the opening of this meeting, of Dr. Hayward, former President of this Society, and for a long series of years an active and efficient member, recommend, that a committee be appointed to adopt such measures as may, on consultation with Dr. James Jackson, Dr. Jacob Bigelow, Dr. John Ware, and the officers of this Society, and such others as they may please to consult, seem appropriate to this sad occasion.

The report of the committee was accepted, and its suggestions unanimously adopted. Drs. Dalton, Jeffries, and J. Mason Warren were chosen a committee to act in accordance with its provisions.—*Boston Jour.*

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, May 27, 1863.

DR. H. B. SANDS, VICE-PRESIDENT, IN THE CHAIR.

NECROSIS FOLLOWING ERUPTIVE FEVER.

Dr. Voss presented the girl from whom he had removed nearly the entire maxillary bone, and whose history he had given at the previous meeting. He remarked that Dr. Southack (*Guy's Hospital Reports* for 1858, and also in *Trans. of the London Pathological Society*) states, that destruction of the inferior maxillary bone is not uncommon in children after eruptive fevers. The teeth, being a dermoid tissue, become affected with the skin, then the pulp of the tooth, and lastly the bone suffers. Dr. Voss stated, that in the present instance, as far as he could learn, there had been no eruptive fevers. He had, however, met with two cases of necrosis of the intermaxillary bone, which was a sequel to scarlet fever. In those cases not only the teeth were destroyed, but in consequence of the deficiency of bone the tip of the nose was depressed, giving rise to considerable deformity. This was not met with in a case of congenital absence of the intermaxillary bone, and he had only seen one such.

CANCEROUS KIDNEY.

Dr. Loomis presented a specimen of a kidney, on behalf of Dr. Leaming. The patient first came under the notice of Dr. Leaming on the 22d of July last; he was 38 years of age, and had been ill during three years previous. At that time he began to have pain in the perineum, which was so severe that it compelled him to take opium to get relief. Very soon after he began to have bloody urine, and the pain located itself in the right lumbar region. His hereditary tendencies were cancerous, cancer having developed itself in both members of the family. There was no hereditary predisposition to tuberculosis. He was a resident of Norfolk, and until eighteen months since he performed his duties as a merchant in that place, but was during all the time under some physician's care; and during the course of the said treatment was twice salivated. At the time of the occupation of the city by the Union army, Gen. Vielé sent a surgeon to the patient, who suspected the existence of cancerous disease, and accordingly put him upon tonic treatment and regulated his hygiene. The patient was under that treatment until the 22d of July last year, when he came to this city and put himself under the care of Dr. Leaming. There was then found dulness on percussion, extending from the lower border of the ribs on the right side to the crest of the ilium, and extending inward to the median line. The patient was very much emaciated, of a sallow countenance, and presented other evidences of cachexia. No signs of disease were found in the lungs. The patient continued in this condition until fall, when he seemingly improved for a time, and had a copious discharge of pus from the rectum, which discharge was attended with corresponding decrease in the size of the tumor. After this the tumor increased in size, pressing up against the under surface of the liver. On the 16th of the present month he died rather suddenly. During the last year he had been compelled to keep his bed for most of the time, and to take large doses of Majendie's solution.

The autopsy was made six or eight hours after death. At the request of the friends of the deceased, the abdomen only was examined. On laying open the abdomen the peritoneum on the right side was found firmly adherent to a mass of some kind which proved to be a large abscess, containing about three pints of pus, in which was found the kidney firmly adherent at its posterior portion. The capsule of the kidney was found very much thickened, and its posterior portion was destroyed so that the substance of the organ formed a portion of the wall of the abscess.

On laying open the kidney it was found infiltrated by tuberculous matter. Before opening the abdomen it was found that the abscess had nearly formed an opening through the integument in the right iliac region. The opposite kidney was found remarkably healthy.

Dr. Flint stated, that it was remarkable that no disease was found in the lungs, the rule being that those organs were the first affected with that disease in the adult.

Dr. Sands remarked, that he had met with a very curious exception to that rule in a post-mortem examination made while he was interne in Bellevue Hospital. In that case, tubercles were discovered in almost every part of the body except the lungs; the surface of the peritoneum, pericardium, and pleura, and in the substance of the liver and kidney.

TUMOR OF TESTICLE.

Dr. Sands presented two specimens of diseased testes removed by Dr. Parker from a gentleman 72 years of age. The patient was the father of a large family of healthy children, and with the exception of having irreducible inguinal hernia for over twenty years enjoyed good health. About a year and a half ago the left testis began to enlarge; but not experiencing any pain or any inconvenience except by its weight, he did not become alarmed until about two months before the period of the operation, when the organ of the opposite side became also diseased. He denied ever having had syphilis. He had neither any hereditary taint to cancerous disease. At the time Dr. Parker saw him, the left testicle measured four or five inches in its longest diameter, and three or four inches in its shortest diameter. The right testicle was not so large. The feel of both was very much the same, firm, elastic, and of even contour. On the left side there was also noticed a firm tumor of the spermatic cord, which extended nearly up to the level of the abdominal ring. No glands in the neighborhood were affected. The disease of the organs was presumed to be cancerous. In consequence of the presence of the irreducible hernia the scrotum was turned up upon the abdomen, and an incision made upon its posterior surface. The left testis was first removed, but the tunica vaginalis of that side was obliterated, so that the enucleation of the mass was rendered quite difficult, but the chief trouble consisted in peeling off the adherent sac from the surface of the tumor. The section of the cord was made very near the ring beyond the point at which it was enlarged. The removal of the right testis was accomplished without much difficulty.

The left organ, on section, presented a firm yellowish surface, but yielded no juice on pressure. It looked very much as if the tissue had been converted into a granular or fatty material. There were no granules whatever to be discovered in the organ. The yellowish mass seemed to pervade almost the entire organ, except at its external surface. The other testicle gave very much the appearance of malignant disease; the tumor was of a rosy hue, and occupied nearly three-quarters the substance of the testicle. The enlargement of the cord was due to the presence of a substance very much like that contained in the tumor of the right testicle. A rather hasty microscopical examination of the tumors was made, with this result.

The most marked microscopical elements were found in the rosy tissue of the right testis. The cells were different from those seen in cancerous tissues. The growth was mainly cellular, the cells nearly uniform in size, rounded, not so large as cancer cells but more like granulation cells, with large nuclei and nucleoli. Seminal tubules were found in the healthy portion of the right testis. The cheesy mass presented a collection of fatty granules and other molecules.

The patient died 48 hours after the operation from gangrene of the scrotum. No autopsy could be obtained.

Dr. Sands was of the opinion that the disease was cancerous, but remarked that its occurrence in both testicles was very rare.

Dr. Krackowizer stated that he had examined two or three specimens under the microscope from the left testicle. The centre of the cheesy mass was made up of shrunken nuclei with free fat and granular matter, while the cortical substance was composed almost altogether of cells set into a homogeneous substance. The cells were small with nuclei, and there were also some free nuclei. Dr. Krackowizer was of the opinion, from the microscopical as well as gross appearances, that the disease was syphilitic sarcocele.

The Society then adjourned.

American Medical Times.

SATURDAY, OCTOBER 31, 1863.

REFORM IN MEDICAL EDUCATION.

The medical session of the year has been inaugurated by the opening of the medical schools throughout the country. We have reluctantly omitted this year to devote a number of the Medical Times to a full statement of the faculties, regulations, etc., of the different schools. Although we deem it important to make an annual exhibit to the profession of the number and regulations of the Educational bodies, there have been so few changes since our last publication of a Students' Number that we may safely refer to the number of last year for any desired information. But we cannot allow the occasion to pass without a word of exhortation on that most trite of all subjects—medical education.

If there is one question which should preeminently interest medical men it is the rank which the profession takes among other professions, and in the community. Every one is naturally jealous of the position of his caste in society. He rightly feels that his own individual character is involved in the public estimate of his associates. Whatever affects the reputation of the whole in a large degree affects the individual. The medical profession of this country has exhibited a most commendable interest in regard to its social position, and has striven with great energy to improve it. With just discrimination it has apprehended the sources of evil, and has endeavored to remove them. But, although these attempts have failed to accomplish all, they have accomplished much, and every true friend of medical reform should take courage, and redouble his efforts.

The first great defect in our system of medical education is the want of a sifting process in the selection of those who are about to commence the study of medicine. The door is thrown widely open, and every one is admitted to enter. No discrimination is made between the intellectual and the imbecile, the educated and illiterate, the moral and immoral. This grand defect must necessarily invite to our ranks all the floating mass of incompetent young men who wish to enter a learned profession. They have but to take their seats in the classrooms of the colleges to be accredited students of medicine. No question is asked as to their natural or acquired qualifications for the study. They may pass through their entire term without being asked a question as to the progress they are making. But it may be said that they are caught at last when they enter the "Green Room." This ordeal, however, is too often the merest farce. The student who has studied three years, has attended two full courses of lectures, the last of which was at "this college," and has punctually paid all the fees, is caught by no such dragnet as an examination for graduation. He slips through its coarse meshes without a wriggle. The first step in a reform of our system of medical education must be the preliminary examination of the student. Before he is allowed to matriculate, he must be examined as to his intellectual fitness for the study of an abstruse and all-embracing science, as to his educational preparation for the higher departments of scientific investigation, and as to his moral fitness for high social position. This reform is reasonable, is just, and is absolutely necessary to the elevation of the profession. We may evade this discrimination of the applicants for admission to the ranks of the profession still longer, but we cannot by any other process compensate for the adulteration which it sustains. The schools may enlarge their courses, and increase their facilities for study to any extent, but they can never make qualified medical men of the mentally incompetent, or thorough students of the illiterate.

Important as is this reform to the dignity, scientific character, and social advancement of the profession, and much as the subject has been agitated, we regret that no school has yet had the courage to adopt the plan of the preliminary examination of applicants for admission. The desire to have large classes, a most unworthy ambition of itself, governs the policy of every school in the country. This competition is carried to a most disastrous extent. Instead of excluding incompetent students, they freely admit them; nay more, in some cases they even place a price upon their heads. If the profession desires reform, it must demand it at the hands of the schools. Let the American Medical Association refuse to recognise a Medical College that does not institute such examinations, and faithfully carry them out.

The second defect in our system of medical education is the want of proper facilities in our schools for giving clinical as well as didactic instruction. By clinical instruction we mean what the term implies, viz. instruction at the bed-side of the sick. The student should be personally brought to appreciate symptoms, to diagnosticate and prognosticate diseases, and to employ remedial agencies. He should not only become proficient in the principles of his profession, but he should also become expert in practice. It is possible for every competent student to attain to this degree of qualification, and before he graduates. The profession ought to ask nothing less of the schools. But in order to this the school must be attached to the hospital. Herein lies the basis of true medical teaching. Didactic and clinical medicine must be taught in the same course, on the same day, and by the same teacher. The precept must be at once reduced to practice if we would fix it ineradicably in the mind, and render it easy of correct application in future. It is a false theory which directs the student to complete his education before he attends the hospital. The golden opportunity is thus lost to impress the lesson of science. Besides, of the three or four thousand medical students who graduate annually from our various colleges, how few can become internes of hospitals, even if they seek such positions. The great majority must go forth from the lecture-room to the stern duties of life, unskilled in the art which they are called to practise. The remedy is at hand. Every school must be required to connect itself with a hospital and make thorough clinical instruction a part of its course of study.

A third defect in our system of medical education is a short course of lectures to the students in mass, without any special adaptation of instruction to the wants of the juniors or seniors. The same lesson is taught indiscriminately to the beginner and to the student about to graduate. A radical change is required in this respect. The course of instruction should be extended over the three years, and the class be divided and subdivided according to the studies pursued. Every student would then pursue his studies systematically, under the immediate tuition of the master.

And, finally, there should be an examining board, independent of the schools, which should have the sole power of deciding the question of graduation of each individual student. Such a board would exercise a most salutary influence, being a check to all excesses on the part of the colleges in endeavoring to graduate large classes.

We have hinted at only a few of the more prominent evils in our system of education, and suggested the proper reforms. No one can doubt that they are of vital importance to the well-being of our profession. The reform rests with the schools, but the body of the profession must apply the stimulus. The former will not move unless impelled by the latter. Every medical man who has any regard for the character and position of his profession should bring his influence to bear through some powerful medium, as an association, directly upon the schools.

THE WEEK.

It is an interesting fact, not sufficiently understood, or at least regarded, by our army authorities, that many forms of disease of soldiers are curable by simple climatic influences. This is especially true of diseases contracted in Southern latitudes when transported to higher latitudes. Patients suffering from the fevers of the South require a long and tedious convalescence when they remain in the localities where the fever was contracted. The same is true of diarrhœa. We are glad to know that Dr. McDougall, the intelligent and zealous Medical Director of the Department of the East, has long been impressed with this fact, and has endeavored to locate hospitals in this Department with a view to the restoration of patients by hygienic influences. The Central Park Hospital, New York, is a model in this respect. Convalescence from all diseases is more rapid in this hospital than in any civil hospital with which we are acquainted. During the first six months of its existence no death occurred in it, although it had its full share of severe cases. We are glad to learn that this class of hospitals, located in delightful and healthy localities, will be increased. Dr. McDougall proposes to locate another at Burlington, Vt., and we do not doubt it will prove of great value to the sick. It would be a great saving of life and suffering if more hospitals were opened at the North, and Northern soldiers were transported to them when convalescing from severe diseases.

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The following method of ventilating hospital wards has been introduced into hospitals in Australia:—

"The space beneath the floor of the ward has been converted into an isolated fresh-air chamber, supplied abundantly with external air by a large guarded aperture in the wall, and regulated by a pulley door. The pulley chain will be under the charge of the nurse inside the door, and, by graduated hooks, the admission of fresh air can be increased or diminished systematically. Each bed is elevated on a wide box platform about six inches high, and so much wider than the bedstead as to allow a convenient step for a patient's legs to rest upon. The sides and ends of the platform are panelled with fine gauze wire. A spacious opening through the floor within this special air chamber admits the fresh air from the general air chamber, and a current, almost imperceptible from its extensive division, unremittingly flows through the gauze wire into the ward all round the patient's bed. The vitiated air that rises to the top of the room finds an outlet through an Arnott's ventilator into the chimney, the aperture of exit giving eight inches to each bed. The fresh air in this arrangement will always be supplied on the *plenum* principle in the natural ascensional manner."

By an order from Washington the U.S.A. General Hospital at Fort Schuyler, N. Y., has been discontinued. This was one of our largest and best appointed military hospitals. It was located on a peninsula near the entrance of East River into Long Island Sound, and had a position favorable to the recovery of the invalids from the southern departments. The buildings were pavilions, arranged tangential to an oblong corridor, open at the sides, and securing free circulation of the air. Each ward contained forty-eight beds, the total capacity of the hospital being 1600 beds. The hospital was in charge of Dr. Warren Webster, U.S.A.

Reviews.

Sanitary Commission. On Hæmorrhage from Wounds, and the Best Means of Arresting it. By Valentine Mott, M.D., LL.D., Emeritus Professor of Surgery and Surgical Anatomy in the University of New York, etc., etc. New York: 1863. pp. 16.

This is the second paper which Dr. Mott has contributed to the army through the Sanitary Commission. We cannot sufficiently admire the professional zeal of the venerable author upon whom age rests so lightly. His opinions upon all surgical subjects are eagerly sought by the profession, and we are glad to welcome these occasional contributions.

In the opinion of Dr. Mott hæmorrhage is a frequent cause of death in the army, either directly or remotely. He says: "It is true, notwithstanding all that has been done by the very admirable surgical and sanitary departments of our immense army, that many soldiers still perish on the field of battle from hæmorrhage, or are so much reduced as to preclude their subsequent recovery. . . . . It is a mistake to assume that there is little or no danger of hæmorrhage from gun-shot wounds. Wounds of the large arteries of the legs and arms from balls and fragments of shells, punctured or incised, always bleed more or less at the time of reception, and more freely as the shock to the nervous system passes off and reaction comes on. Even where this nervous shock is not sufficient to produce immediate death, the chances for ultimate recovery most frequently turn on the mere question of loss of blood."

Impressed with the importance of instructing officers and soldiers in regard to the position of the large arteries of the limbs, and the simple methods of arresting hæmorrhage, Dr. Mott was induced to prepare this monograph. The pamphlet is designed therefore rather for the soldier than the Surgeon. Several colored plates are given illustrating the position of the large arteries of the limbs. These are followed by a diagram of a tourniquet recently introduced into practice by Dr. A. B. Mott, which is strongly recommended by the author for its simplicity, and for making compression at opposite points of the limb, thus leaving the venous circulation for the most part interrupted. Dr. Mott strongly recommends its distribution in the army, not only for the arrest of hæmorrhage but for "the moral courage and confidence which the possession of this instrument would give the soldiers. We have seen that in some cases men dread the manner of death more than death itself, and that, in general, death by hæmorrhage is regarded with most horror. We have seen that it was by possessing the power to control hæmorrhage, that Paré infused a brave spirit into the French troops. So the possession of a tourniquet by any soldier who feels competent to use it, supports his courage, and he feels that if wounded in the service of his country his blood will not be needlessly wasted."

Dr. Mott closes his interesting and useful paper with the following noble sentiment, which exhibits the most exalted patriotism:—"In this great struggle whatever is left of my days is at the disposal of my country, whether it be with the sword, or with the knife, or with the pen—on the field of battle, in the hospital, or at home. The lapse of years is beginning to admonish me, that what more I have to say or do for my fellow men must be said or done quickly. And if the exigencies of this conflict should require it, I am ready not only to sustain our army with words of fortitude and hope, but again to don the harness, and make one more campaign of active service in the cause of my country, and devote to her whatever remains of the autumn of my life with its autumnal fruits."

Army Medical Intelligence.

(CIRCULAR NO. 21.)

Surgeon-General's Office,
Washington, D.C., Oct. 1, 1863.

The following instructions concerning the manner of making out the "Accounts of Private Physicians under Contract," are issued for the benefit of all concerned:

1st. Accounts must be made out for periods of one or more complete months, commencing with the date of entry upon service. No account embracing fractional periods of a month will receive attention, unless it appears upon the face of the account either that the station of the physician has been changed or his contract annulled.

2d. Officers certifying to accounts of a "private physician under contract," must give their official title, and state explicitly the capacity in which they are serving; otherwise their authority to make such a certificate may be questioned. E.g., A. B., Surgeon U.S.A., *in charge ——— General Hospital.* C. D., Surg. Vols., *Medical Director*, 1st *Division*, 2d *Army Corps.* E. F., Col. 40th Ohio Vols., *Commanding Post, Garrison, or Regiment.*

3d. The Hospital, Post, Regiment, or Camp in which the services are rendered, must be explicitly stated, and the strength of the command also noted.

When accounts are certified to by a Line Officer commanding a Post, Regiment, or Camp, they must be transmitted to this Office, through the Department Medical Director, and receive his approval.

5th. The mere approval of an account will not secure its passage through the Treasury. The signature of the certifying officer must be placed in the blank space *immediately below the certificate*, and not, as now frequently occurs, in some other part of the account, thus leaving the certificate unsigned.

6th. The dates between which the services are rendered must be accurately stated. Both the *initial and final day* are counted; thus, from "August 20, 1863, to September 20, 1863, inclusive," is not one month, but one month and one day. It should read, "from August 20, 1863, to September 19, 1863, inclusive," being *one* month.

7th. When instruments are furnished to a Contract Physician by a Medical Purveyor, the kind, and cost price thereof, are to be reported by the Medical Purveyor to this office. The cost price is then deducted from the first account for services rendered subsequent to such reports. The instruments then become the private property of the Contract Physician, and are in no case to be turned back to a Purveyor or other officer without the written order of this office.

8th. When a Contract Physician has been absent from duty, the certifying officer must state the reason and duration thereof.

Contract Physicians are requested to use the blank printed accounts furnished by this office; an abundant supply of which will be issued to every hospital, post, etc., on the request of the Surgeon in Charge or Commanding Officer.

Contract Physicians, who desire it, can have their certificates made payable to any person besides themselves, by simply endorsing on the face of the account:

" Pay to the order of ——— ———.
(Signature.) ——— —.—,
" *Acting Ass't Surgeon, U.S.A.*"

The certificate will then be made out, in accordance with such order, and the payee has only to prove his identity in order to receive the money.

The numerous and embarrassing delays in this class of accounts abundantly prove that too great care cannot be exercised, both by the certifying officer and the physician in whose name the account is rendered.

Jos. K. Barnes,
Acting Surgeon General.

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ORDERS, CHANGES, &c.

The Board instituted by Special Orders No. 414, September 15, 1863, from this Office, to examine the hospitals in the Department of Washington, will proceed to examine the hospitals in the District of St. Mary, Md., and report in like manner the names of all the enlisted men, whether patients or employees, connected therewith, who are able to join their regiments; also the names of all regular soldiers sick or not. The company and regiment of each man will be given, and also the name of the surgeon-in-charge of the hospital.

Surgeon D. L. Magruder, U.S.A., is hereby relieved from duty in the Department of the Missouri, and will proceed without delay to Louisville, Ky., and will relieve Surgeon A. P. Meylert, U.S.V., in the duties of Medical Purveyor at that place.

Permission, to visit Washington city, has been given to Surgeons H. S. Hewit and A. E. Stocker, U.S.V.

Assistant-Surgeon C. R. Greenleaf, U.S.A., has been relieved from duty at the United States General Hospital, Chestnut Hill, Philadelphia, Pa., and will report without delay to Surgeon J. Simpson, U.S.A., Medical Director, at Baltimore, Md., for duty in his office.

Assistant-Surgeon T. C. Brainerd, U.S.A., is hereby relieved from duty in the Department of the South, and will report in person without delay to the surgeon-in-chargo of Chestnut Hill Hospital, vice Assistant-Surgeon Greenleaf, relieved.

On the recommendation of a Board of Officers, convened by Special Orders No. 285, June 27, 1863, from this Office, Assistant-Surgeon C. S. De Graw, U.S.A., will at once repair to this city, and report in person to the Surgeon-General, U.S.A., for assignment to hospital duty.

Assistant-Surgeon-General R. C. Wood, U.S.A., has been ordered to repair to Louisville, Ky., and establish his office at that place, instead of St. Louis, Mo.

By direction of the President, the following officers have been discharged the service of the United States, in accordance with General Orders No. 100, August 11, 1862:—

Surgeon E. D. Dailey, U.S. Vols.
" G. B. Twitchell, U.S. Vols.

Surgeon W. W. Holmes, U.S. Vols., is seriously ill, at Hillsborough, Ohio.

Surgeon J. V. Z. Blaney, U.S. Vols., has arrived at Headquarters, Department of Western Virginia, and assumed the duties of Medical Director.

Dr. William Breen, of New York, has been appointed Assistant-Surgeon 8th Regt. U.S. Colored Troops.

Assistant-Surgeon E. F. Bates, U.S. Vols., has been promoted Surgeon.

Drs. E. P. Morong of Md., N. S. Barnes of N. Y., James W. Leete of N. Y., G. A. Mursick of N. Y., R. Fletcher of Ohio, N. F. Marsh of Ky., H. Eversman of Ky., and J. M. Study of Ind., have been appointed Assistant-Surgeons of Vols.

Assistant-Surgeon C. M. Worthington, 14th Pennsylvania Cavalry, has arrived in Washington, D. C., from the Libby Prison, Richmond, Va. He reports the arrival of forty-seven surgeons from General Rosecrans' army.

Surgeon H. S. Hewit, U.S.V., has arrived in Washington, D. C., from General Grant's Headquarters, on leave.

Assistant Surgeon Charles S. De Graw, U.S.A., has been assigned to duty in the Campbell Hospital, near Washington, D. C.

Surgeon R. B. Bontecou, U.S.V., has assumed charge of the Harewood Hospital, Washington, D. C.

Surgeon R. B. McCay, U.S.A., has been assigned to duty in the office of the Medical Inspector-General, at Washington, D. C.

The following assignments to duty of medical officers have been made:—

Surgeon George E. Cooper, U.S.A., to proceed without delay to Louisville, Ky., and report in person to Assistant Surgeon-General Wood, U.S.A., at that place, for duty.

Surgeon C. F. Campbell, U.S.V., Assistant-Surgeons F. P. Morong, U.S.V., N. S. Barnes, U.S.V., to report in person without delay to Surgeon Charles Sutherland, U.S.A., Medical Director, Department of Virginia and North Carolina, at Fort Monroe, Va.

Assistant-Surgeon J. W. Leete, U.S.V., to report in person without delay for duty to Surgeon J. Simpson, U.S.A., Medical Director, Baltimore, Md.

Assistant-Surgeon G. A. Mursick, U.S.V., to report in person without delay to Surgeon R. O. Abbott, U.S.A., Medical Director, at Washington, D. C., for duty in the Stanton Hospital.

Assistant-Surgeons R. Fletcher, U.S.V., N. F. Marsh, U.S.V., H. Eversman, U.S.V., to report in person without delay to Surgeon W. S. Kine, U.S.A., Medical Director, Department of the Ohio, at Cincinnati, Ohio, and by letter to Assistant Surgeon-General Wood, at Louisville, Ky.

Assistant-Surgeon J. M. Study, U.S.V., to report in person for duty to Surgeon John Moore, U.S.A., Medical Director, Department of the Tennessee, at Vicksburg, Miss., and by letter to Assistant Surgeon-General Wood, at Louisville, Ky.

Surgeon John C. Dalton, U.S.V., has been relieved from duty in the Department of the South, and has reported to the Medical Director, Department of the East, at New York city.

Surgeon John T. Hodgen, U.S.V., has returned to St. Louis, Mo., from a tour of inspection of the troops composing the Army of Arkansas. He tenders his resignation with a view to permit himself to perform more fully his duties as Surgeon-General of Missouri.

Surgeon John M. Robinson, U.S.V., has returned to Clarksburg, Va., from leave of absence, and is awaiting orders; the General Hospital at that place, and of which he was in charge, having been discontinued.

Surgeon James C. Whitehill, U.S.V., is Medical Director of the Army of Arkansas, at Little Rock, Ark.

Surgeon J. W. Lawton, U.S.V., has been relieved from charge of the General Hospital at Gallipolis, Ohio, and is en route to the Department of the Cumberland.

Surgeon B. Beust, U.S.V., has returned to the Department of the South, from leave of absence, and is now sick at Beaufort, S. C.

Surgeon S. S. Mulford, U.S.A., has been assigned to duty at Fort Pulaski, Ga.

Assistant-Surgeon W. Banks, U.S.A., is on sick leave at Covington, Ky.

The General Hospital at Morehead city, N. C., is near completion. It is named the Mansfield Hospital, in honor of the memory of the late General Mansfield, who was killed at the battle of Antietam. It was regularly opened for the reception of the sick on the thirty-first of August last; the wards when finished will accommodate from 300 to 350 patients, with kitchen and laundry appliances sufficient to increase the capacity to 600, at any time the interests of the service may require it. It is in charge of Surgeon J. B. Belangee, U.S.V.

Assistant-Surgeon J. A. White, U.S.V., has arrived in New Orleans, La., and been assigned to duty in the University Hospital in that city.

Surgeon F. Salter, U.S.V., has been transferred from Cumberland Hospital, Nashville, Tenn., to General Hospital, Chattanooga, Tenn.

The General Hospital at Fort Schuyler, N. Y., will not be dismantled until further orders, but will be held in readiness for convalescents until the cold weather prevents its further use.

Sick and wounded soldiers now absent from Memphis, Tenn., on furlough in Iowa and the Northwest, permanently disabled or entitled to examination for the Invalid Corps, will be retained in General Hospitals nearest their homes, for examination for assignment or discharge.

The following cases, in which Medical Officers have been concerned, have been tried by Court-Martial recently.

Assistant-Surgeon Wm. Robinson, 8th Kentucky Infantry, tried for conduct unbecoming an officer and a gentleman, acting in a disgraceful and disorderly manner while in a state of intoxication, found guilty, and sentenced to be dismissed the service of the United States (G. O. No. 180, Dept. of the Cumberland, Aug. 4, 1863).

Surgeon Alfred Wynkoop, U.S.V., tried for conduct to the prejudice of good order and military discipline, and sentenced to be dismissed the service of the United States. Sentence remitted by the President on recommendation of the General commanding the Army of the Potomac, to severe reprimand, and to be published in General Orders, it appearing that the act was one of indiscretion, and not of intentional criminality, and that no evil resulted from it (G. O. 281, A. G. O., Aug. 11, 1863).

Assistant-Surgeon Edmund G. Pugsley, 1st Minnesota Vols., tried for conduct to the prejudice of good order and military discipline, and conduct unbecoming an officer and a gentleman, found guilty, and sentenced to be cashiered (G. O. No. 75, Army of the Potomac, Aug. 15, 1863).

Assistant-Surgeon George Dougherty, 59th Regiment New York Vols., tried for drunkenness, found guilty, and sentenced to be dismissed the service of the United States (G. O. No. 77, Army of the Potomac, Aug. 19, 1863).

Assistant-Surgeon James M. Morrison, 48th Pennsylvania Vols., tried for conduct unbecoming an officer and a gentleman, enticing a non-commissioned officer to leave camp with him without a proper pass, found guilty, and sentenced to be dismissed the service of the United States (G. O. No. 138, Dept. of the Ohio, Aug. 19, 1863).

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The Art and Health Congress at Ghent.—A congress has recently been held at Ghent for the promotion of art and the extension of sanitary information. This has excited the displeasure of the ecclesiastical authorities, and they have ordered a solemn mass to be performed "as an act of reparation for the blasphemy and impiety" uttered at its sittings. Fortunately, in the present enlightened condition of the inhabitants of Belgium this priestly intolerance will no doubt be treated with the contempt it deserves.—*Lancet.*

Original Lectures.

LECTURES ON THE MORBID CONDITIONS OF THE BLOOD.

DELIVERED AT
THE BELLEVUE HOSPITAL MEDICAL COLLEGE.
PRELIMINARY TERM, SESSION OF 1868-4.

By AUSTIN FLINT, M.D.,

PROF. OF THE PRINCIPLES AND PRACTICE OF MEDICINE.

LECTURE III.

Morbid Conditions relating to Fibrin.—Hyperinosis.—Hypnosis.—Pathological Facts concerning Coagulation of the Blood.—Buffy Coat.

Having considered in the preceding lecture morbid conditions relating to the organized or corpuscular elements of the blood, it remains to consider morbid conditions relating to the other two divisions of blood-constituents, viz. the organic and mineral substances which enter into its composition. Directing attention to the constituents distinguished as organic, the more important of these are *fibrin* and *albumen*. What are the known morbid conditions relating to these constituents? Proceeding to answer this inquiry, the morbid conditions relating to fibrin will first claim attention.

The fibrin is that portion of the liquor sanguinis or blood plasma which solidifies when the blood is withdrawn from the vessels. In its normal state it is a liquid. It solidifies by an inherent process called coagulation. It forms the coagulum or clot which is observed when a quantity of blood is drawn into a vessel and allowed to remain for a few moments. In the process of coagulation the corpuscular elements become imprisoned, and are retained within the clot; hence the red color. Separated from the corpuscular and other constituents, it is an elastic substance more or less resisting to pressure, and, examined microscopically, presents an abundance of minute filaments irregularly distributed and interlaced, forming a reticular arrangement; this is called fibrillation. With respect to its sources and uses physiologists are not agreed, some regarding it as transformed albumen, and constituting *par excellence* a nutritive element of the blood, while others suppose it to be effete matter which is to be excreted. The coagulated lymph exuded in certain inflammations is essentially fibrin, and this is probably the basis of all the exudates. With respect to its capability of becoming organized, after it has exuded and coagulated, pathologists differ. In view of the indeterminate state of our knowledge of fibrin in its physiological relations, the amount of our knowledge of it in a pathological point of view, must needs be limited. The only morbid conditions, as yet well ascertained, have reference to the quantity of fibrin. In certain diseases the fibrin is increased, and in other diseases it is diminished in quantity.

An abnormal increase of the fibrin of the blood constitutes a condition called, after Simon, *hyperinosis*. This condition characterizes acute inflammations. The average proportion of desiccated fibrin in health is about 2½ in a thousand parts. In different cases of acute inflammation, the increased proportion is found to vary from 3 to 12 parts in 1000. Cases of acute articular rheumatism present the largest increase of fibrin; pneumonia ranks next as regards this feature, and capillary bronchitis next. The increase of fibrin is not found to bear any relation to the previous health or vigor of the patient; it is not less in the feeble and sickly, than in the strong and vigorous, when attacked with acute inflammation. The increase takes place when inflammation is developed as an intercurrent affection in the course of diseases in which, if not complicated with inflammation, the fibrin is diminished, *e. g.* the continued fevers. The hyperinosis has not been ascertained to precede the development of inflammation. The latter is not the effect of the former, the reverse is probably true; but, with our present knowledge, it is better to say that the augmentation of fibrin is a concomitant of inflammation, a pathological connexion of some kind existing between them. We know too little of the physiological relations of fibrin to understand the nature of this pathological connexion.

Not knowing the nature and extent of the pathological relations of hyperinosis, it is difficult to decide, upon rational grounds, how far this element of inflammation is a source of therapeutical indications. Blood-letting is found to increase the fibrin of the blood, and, hence, is not an appropriate remedy for inflammation, so far as this element is concerned. Animal diet, in health, renders the fibrin more abundant than vegetable; hence, theoretically, farinaceous food is suited to the treatment of inflammations. But in starving animals the fibrin increases above the normal proportion; *ergo*, a great reduction of diet is not suited to the treatment of inflammations. The supposed action of certain remedies in diminishing the fibrin of the blood, appears to be based on the power of effecting the solution of fibrin out of the body. These effects are quite different. The fibrin in the blood is in a liquid state, and its diminution has nothing in common with its solution after coagulation has taken place. To preserve in the vascular system the liquidity of fibrin, in other words, to prevent coagulation within the heart or vessels, is an object in therapeutics, as will be presently seen.

An abnormal diminution of fibrin is called, after Simon, *hypinosis*. This is less frequent than an increase of fibrin, but it probably constitutes a graver morbid condition. It occurs frequently, but not constantly, in the continued fevers, provided they are not complicated with acute inflammation of any part. As a rule, the diminution of fibrin is progressive as fevers advance in their career; and the amount of diminution is in proportion to the degree of exhaustion of the vital forces or adynamia. In the frequent occurrence of hypinosis in these fevers, we have a ground of pathological distinction between them and inflammations.

The decrease of fibrin does not occur as frequently in the eruptive fevers. In variola the quantity is generally above the normal average, which is attributable to the cutaneous inflammation. In rubeola it is neither increased nor diminished. In scarlatina it is usually a little below the normal average. It is not diminished in intermitting fevers.

It is difficult to say how far, if at all, the state of hypinosis constitutes an indication for treatment in the continued fevers. It is not improbable that the importance of animal food in these fevers may have relation to this state, and it has been conjectured that the mineral acids are useful in consequence of their tending to increase the quantity of fibrin in the blood.

The foregoing changes relating to fibrin are quantitative. Qualitative alterations are inferred, but they have not been satisfactorily ascertained. It may be rationally concluded that certain morbid characters in exudations denote perversions of fibrin, but the latter have not been demonstrated. For example, the tuberculous exudation has been considered as morbidly changed fibrin. And this view may be probable, but, in the present state of our knowledge, it is hypothetical. The existence of prior blood-changes of any kind, in this or any other exudation, has not yet been proven. In short we have no positive knowledge of morbid changes in the quality of the fibrin of the blood, nor is this knowledge easily obtained, since the characters of this constituent, as it exists in the *liquor sanguinis*, are with difficulty studied. It is obtained, isolated from other constituents, only when coagulated, and it is then in an abnormal state. It is not certain that variations observed in coagulated fibrin, either within or without the vessels, represent morbid changes which existed when it was liquid and in circulation.

Certain of the phenomena pertaining to the coagulation of the blood, without and within the vascular system, are not only interesting but important in their pathological relations. When healthy blood is drawn from a vein in a full stream, into a vessel of suitable size and form, for example an ordinary quart bowl, the fibrin coagulates within a period varying from five to twenty minutes. In the process of coagulation the organized elements or corpuscles become entangled in the meshes of the fibrin, and, when the process is completed, we have a division of the mass into two portions, viz. the coagulum or clot, consisting of the fibrin and containing the red and white globules, and a liquid called serum, which holds in solution albumen, together with other organic and certain saline ingredients. The clot is usually more or less reddened throughout, by the presence of the red globules. The serum may also be reddened by hæmatin, or it may be transparent. The size, form, and appearances of the clot were formerly supposed to furnish very valuable pathological indications, and the treatment of diseases was in a great measure based thereon; valuable information may, in some instances, be derived from this source, but less than was supposed before the process was as well understood as it now is.

As regards the time occupied by the process of coagulation, there is some variation, under precisely similar circumstances, in different persons in health. It differs in different diseases, and it is affected by a variety of extrinsic circumstances. Other things being equal, the coagulation in cases of acute inflammation is slow. In proportion as the powers of life are reduced, the process is rapid. An abnormal quantity of carbonic acid retards it. If blood be retained for some time in the veins, after the ligature is applied for venesection, before the vein is opened, the coagulation is slow. It is slow if the blood be abnormally aqueous. Alkalies introduced into the veins or mixed with blood after it is drawn, impede and may arrest the process. Hence, it may be inferred that, under certain conditions of disease, excessive alkalinity of the blood may cause delay in coagulation, or account for the blood remaining fluid. The process is also retarded by sugar, casein, and albumen introduced into the blood. It thus appears that diverse conditions of the blood, irrespective of the quantity of fibrin, may affect the time occupied by the coagulation, and even prevent it from taking place. When, therefore, the blood remains fluid, as it does after death in certain diseases, this may not be owing to a deficiency of fibrin, but because morbid conditions interfere with the process of coagulation. And, hence, the quantity of coagulated fibrin may not represent the actual proportion contained in the blood-plasma.

Coagulation does not always occur after death in persons destroyed by lightning, and the electric current passed through healthy blood when drawn from the vessels causes it to remain for a long time fluid. In animals destroyed after prolonged muscular exertion, as when hares are hunted to death, the blood remains frequently, not invariably, fluid. This is true in certain cases after death by apnœa. Fluidity of the blood after death from fevers of a low form is sometimes observed.

But various extrinsic circumstances affect coagulation. It takes place when blood is drawn in a full, large stream, less rapidly than if it flow slowly through a small orifice. When it trickles away it may coagulate almost immediately. It takes place more rapidly if the blood be agitated than when it is allowed to remain at rest. The blood which flows last during a venesection coagulates more rapidly than that which is first received; and the process is more rapid when the blood is received into a wide and shallow vessel than in one deep and narrow. The process is more rapid if the blood be received into a warm than into a cold vessel, and if the inner surface of the vessel be rough or irregular than if it be smooth.

The size of the clot is, in general, larger the more rapid the coagulation, but it is usually under these circumstances soft, loose, and friable. Conversely, if the coagulation be slow, the clot is apt to be small and firm. These points of difference may not depend on the quantity or quality of the fibrin. In a rapid coagulation the globules are diffused throughout the mass, and this renders it large and soft; but if the process be slow, the globules subside to the bottom, and, under these circumstances, the lower part of the clot is always larger and softer than the upper. If the process be rapidly completed, considerable serum is retained in the meshes of the fibrin; if slowly, the serum is squeezed out, and hence the clot is smaller and firmer. But the quantity of fibrin and the force of its contraction are by no means unimportant in determining the size and consistence of the clot. A large and firm clot denotes an abundance of fibrin, and, also, a faculty belonging to coagulated fibrin, viz. contraction. A large and soft clot, on the other hand, denotes, not an excess of fibrin, but a rapid coagulation, which entangles the globules before they gravitate, and but little power of contraction in the fibrin. The former characters of the clot are characteristic of inflammation, the latter of fevers and cachectic affections.

Under certain conditions the upper portion of the clot presents a layer, more or less deep, of fibrin, which is devoid of the red globules. This layer is of a greyish white color, and has the characters of fibrin isolated from the other blood constituents. It is called the *buffy coat or crust.* Great importance has been attached to it as evidence of acute inflammation, and as denoting the propriety of active antiphlogistic measures of treatment, more especially bloodletting. The circumstances under which it may occur were not formerly fully understood, and, consequently, it has heretofore led to much error, and given rise not unfrequently to injurious practice. The preceding considerations will prepare for an explanation of the buffy coat, and for an appreciation of its pathological significance.

Two conditions are specially favorable to the production of the buffy coat, viz. slowness of coagulation and excess of fibrin. The specific gravity of the red globules is greater than that of the liquor sanguinis; therefore, the former sink in the latter. This fact is always illustrated in a clot; the lower portion is rendered black and friable by the abundance of globules, which have gravitated, while the upper portion contains a much smaller number. Now, if coagulation be sufficiently retarded, all the red globules gravitate below the upper portion, and it is then white or buff-colored, that is, it is pure fibrin, in other words, the buffy coat. It is evident that this coat or crust of fibrin devoid of red globules will be deep in proportion to the abundance of coagulated fibrin. Slow coagulation of the blood and an excess of fibrin characterize acute inflammation. Hence, the buffy coat occurs in cases of acute inflammation, and blood presenting it has been styled "inflammatory blood."

But other circumstances may give rise to the buffy coat. If the serum be thin and watery, the specific gravity of the red globules becomes relatively greater, and they sink more rapidly. And if the red globules are much reduced in number, the upper portion of the clot is devoid of them in consequence of their paucity; the proportion of fibrin to the globules is relatively increased, although the former be not actually more abundant than in health. A buffy coat may be produced under these circumstances which denote morbid conditions of the blood, quite the reverse of those belonging to acute inflammation. This fact was not formerly known, and how often patients already suffering from the morbid conditions of the blood which bleeding tends directly to increase, have been bled over and over again because the blood presented a buffy coat, they whose retrospections extend backwards a quarter of a century can best judge. Blood-lettings under the circumstances just stated favor more and more the production of the buffy coat. The various circumstances, already stated, which either retard or promote the process of coagulation, will, of course, either favor or prevent the formation of a buffy coat, such as the rapidity of the flow of blood, size of the vessel, etc.

The cupped appearance of the clot was formerly supposed to indicate intensity of inflammation. Buffed and cupped blood was considered as highly inflammatory. The concavity of the upper surface, or cupped appearance, after the lapse of several hours, is due to the force of the contraction of the fibrin, and the absence of the red globules. Owing to the gravitating of the globules when the buffy coat is formed, it is of less diameter than the lower portion of the clot which contains the globules. Now, the continuity of the exterior of the buffy coat with the portion below, limits the contraction of the superficies, while the central part, not thus mechanically restrained, sinks inward, and, hence, the concavity or cupped appearance. A cupped clot, then, necessarily involves a buffy coat, and it occurs whenever the latter is present, and the force of contraction of the coagulated fibrin is sufficient. The latter condition is not peculiar to "inflammatory blood." It occurs in chlorosis and other non-inflammatory affections, and it is not, therefore, a criterion of inflammation. The concavity or cupped form of the clot causes it to swim in the serum. It is buoyed up like any hollow vessel. Otherwise the density of the clot causes it to sink in the serum of the blood.

In discriminating the buffed and cupped appearance of the blood, as denoting inflammation, or otherwise, the size and consistence of the clot are important. A large, firm clot which is buffed and cupped, is highly significant of inflammation. On the other hand, the buffed and cupped clot, if incident to impoverished blood, is small in size, and, probably, less firm. Does buffed and cupped blood, when it denotes an excess of fibrin, constitute an indication for blood-letting? Certainly not, for blood-letting tends to increase the fibrin and diminish the globules. The propriety of blood-letting must therefore rest on other grounds.

Original Communications.

A CASE OF YELLOW FEVER,

WITH POST MORTEM AND MICROSCOPICAL EXAMINATIONS;
THE YELLOW COLOR OF THE SKIN DUE TO THE PRESENCE OF HÆMATOIDINE.

By S. FLEET SPEIR, M.D.,

CURATOR TO THE BROOKLYN CITY HOSPITAL.

JOHN WILSON, æt. 25 years, sailor on ship Swaomie from Aspinwall,* admitted July 14, 1863. Service of Dr. D. S. Landon. *Symptoms.*—General pyrexia; vomiting (the vomited matter he said was of a blue color); pain in the head, abdomen, and limbs; mental and bodily prostration; great irritability of stomach; black vomit; tongue deep red at the tip and edges, loaded and dark in the centre; pulse slow; skin yellow; conjunctiva yellow; urine scanty; alvine dejections of a tarry appearance. There was also a suppurating wound over the left orbit, received while on shipboard some two weeks previous.

July 15.—Patient failing rapidly; seen in consultation by Drs. Landon, Bell, Crane, and Smith, who pronounced it to be a well marked case of yellow fever. July 16.—Died.

Autopsy—three hours after death. Body well formed, emaciated; rigor mortis well marked; surface yellow; some small patches resembling ecchymoses; conjunctiva yellow; blood upon the lips; thighs and nates stained with dark blood, passed by stool; contused wound about one inch in extent upon the forehead, discharging pus; bone beneath bared of periosteum; left eye swollen and ecchymosed. *Brain.*—On removing the calvarium the surface of the dura mater was bathed with pus for a space of about two inches in extent, at a point corresponding with the external wound; pus between the dura mater and arachnoid, and upon the surface of the brain in about the same extent of surface, but in small quantity. On cutting the optic nerve of the left side pus escaped from the orbit. Small amount of serum in lateral ventricles; the meningeal inflammation did not extend into the substance of the brain. The blood which escaped on cutting the sinuses coagulated immediately. *Thorax.*—Pectoral muscles very dark-colored; a few ounces of bloody serum in the pleural cavity; lungs free from adhesions, contained scattering tuberculous masses undergoing softening. *Heart.*—The pericardium contained from three to four ounces of clear serum; weight of heart 13 ounces; veins upon surface distended with blood. Upon opening the large vessels of the thorax the blood came from them fluid, but coagulated immediately on exposure to the air. Coagulum in right side of heart, very firm and yellow, filling the cavity; small coagulum in the left side; valves normal. *Abdomen.*—Muscles very dark colored. *Liver.*—Fawn-colored; weight 4 pounds 7 ounces; mottled; in some places lighter than in others; cut surface smooth and dry; bile ducts contained small amount of yellow bile; gall-bladder contained black bile. *Spleen*—7½ ounces, softened. *Kidneys.*—7 ounces, light colored; cortical substance increased; in one of them was a small cyst containing black fluid; supra-renal capsules large and very firm and dark colored. *Bladder.*—Contained a few drachms of turbid urine; mucous membrane ecchymosed. *Pancreas*—enlarged. *Stomach.*—Contained about twelve ounces of black, sanguineous liquid; its mucous membrane was congested and ecchymosed. The whole intestinal canal was filled with a black, sanguineous liquid. The small intestine contained a living tape-worm six or seven feet long, the lower portion being broken off. Its position was lengthwise, the head towards the upper part of the canal. The mucous membrane of the intestines was ecchymosed in some places. There was entire absence of fæcal matter, apparently.

Microscopical Examination.—The contents of the stomach and intestines were acid, and contained altered blood corpuscles, and abundant granules of hæmatoidine. *Liver.*—Its cells were large, and some of them fatty, but the greater portion presented the appearance of advanced waxy degeneration; there was abundance of hæmatoidine and a few blood crystals. *Heart.*—Granules of hæmatoidine, muscular fibres undergoing molecular degeneration. *Kidneys*—fatty; granules of hæmatoidine. *Spleen*—softened; abundant granules of hæmatoidine. *Pancreas* and *supra-renal* capsules contained hæmatoidine. The skin and conjunctiva contained abundant granules of hæmatoidine, and seemed to derive their yellow color from the presence of this substance. *Blood.*—Some of the corpuscles were found altered and broken down. In the examination of a case of a similar nature, reported in this Journal a few weeks ago, I was led to believe that the presence of hæmatoidine in the skin and tissues might give rise to a yellow coloration of the same, similar to that supposed to be produced by the coloring matter of the bile, in cases of yellow fever, jaundice, etc. The examination of this second case seems to verify such a suggestion.

The pathology of the two cases was very similar. In each the principal lesion was an altered condition of the blood, and its extravasation in large quantities into the alimentary canal, and among all the tissues and organs of the body. In the first case the extravasated blood acquired a very dark color, and produced a purplish coloration of the tissues. In the second case the extravasated blood had undergone changes of a different nature, and assumed a lighter color, producing a yellow coloration of the tissues, and particularly of the skin and conjunctiva.

These examinations were carefully made, and are believed to be accurate. The following conclusions are therefore deduced from them. 1st. This was a genuine case of yellow fever; 2d. Its principal lesion was an altered condition of the blood, and its extravasation among the tissues and organs of the body; 3d. The coloration of the skin and tissues was produced by the extravasation and decomposition of the blood, its hæmatine changing into hæmatoidine, and producing a yellow coloration; 4th. In cases of "blood disease," characterized by the extravasation of blood among the tissues, the latter may assume a variety of colors, depending upon changes of color during the decomposition of the hæmatine and the presence of hæmatoidine.

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* Several sailors from the same vessel have since died of yellow fever.

The well known changes of color which take place around ecchymotic spots and old extravasations, also the color of the corpora lutea, the yellow softening of the brain, and the varieties of color in pigments, seem to confirm these statements, all of them being due to the presence of hæmatoidine.

Drs. Landon, Bell, and Smith were present at the post-mortem. Dr. Bell has also examined both cases microscopically; he concurs in these opinions.

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OPERATION FOR STRANGULATED HERNIA—

RADICAL CURE.

By N. N. HORTON, Surg. 8th La. Inf.

Peter Fountain, Private of Co. B, 8th Regiment La. Inf., of African descent, aged thirty-seven years, has had oblique inguinal hernia on the right side for nine years. Previous to enlistment he was a slave. His master objected to his having his present wife, and tied him up by his neck to one post, and his feet to another. In this position he received over five hundred lashes, and in straining to get loose he felt something give way in the groin.

The hernia thus occasioned was completely under the control of a truss until about a month after his enlistment, when he enlarged the breach by slipping with a load while on fatigue duty; since then, by straining much, the intestines would be forced down, and form a tumor as large as a good-sized cocoanut. Heretofore he has been able to reduce the hernia himself, but this time he was unable to return it, and after it had been down forty-eight hours, he applied for medical assistance. Taxis, alone, was tried without success. Chloroform was then administered, but even then the taxis failed to reduce it. I then proceeded to operate with the patient under the influence of chloroform. The sac was opened, and it contained a portion of the omentum and small intestines, which were a good deal congested, with a considerable amount of serous effusion. The stricture was divided, and the parts returned; five sutures were taken, and compress and T-bandage applied. Sufficient opium was given to keep the patient perfectly quiet, and to prevent peritonitis. He was put upon very light diet. The operation was performed on August 17th, and the next day all symptoms were favorable, and there was no sign of peritonitis. Aug. 19th—Still under the influence of opium, and I relieved the bladder with the catheter. Aug. 20th—No untoward symptom. Aug. 21st—No sign of peritonitis; he can relieve the bladder without the aid of the catheter. Aug. 22d—Removed the sutures, the patient was only partially under the influence of opium. Aug. 23d—Wound entirely healed by first intention. Aug. 24th—Bowels moved regularly. Aug. 25th, 26th, and 27th—Doing well, and no sign of the hernia returning. Aug. 28th—Patient is allowed to get upon his feet, and is free from hernia. The patient has been doing duty from the first of September to the present time without a sign of the return of the hernia.

Milliken's Bend, La., Oct. 12, 1863.

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CASE OF GUNSHOT WOUND.

By P. J. FARNSWORTH, M.D.,

OF LYONS, IOWA.

In these days gunshot wounds are not uncommon, but it is not often that all the effects can be noted, or that a post-mortem follows. The following is a case in which all the conditions were noted.

An officer, attempting to impound some hogs, was attacked by the owner, and an affray ensued. The officer fired his revolver as the man was coming down upon him. After the shot the hog owner threw down the officer, and wrested the revolver from him. They were separated, but he pursued the officer for thirty or forty rods, then went back for some distance to his hogs, and sank down saying he was shot. The surgeons were immediately sent for, and were on the spot in half an hour. The wound was just at the lower edge of the sixth rib near its sternal end. There was a great amount of prostration, and a complaint of pain at the pit of the stomach. The pain increased at every respiration. Reaction took place slowly, but by the use of stimulants and external warmth he rallied. Copious vomiting then took place. The probe seemed to follow the wound in a downward direction, and we conjectured that the ball might have entered the kidney. Morphine seemed to increase the irritation of the stomach, and small pills of opium were given, which seemed to give relief, and drink and nourishment were retained. The dyspnœa seemed to increase, with tenseness of the abdominal muscles. He was unable to pass his water, and a catheter was introduced, which brought away the urine, normal in quantity and quality.

The man lived from half past ten A. M. until two the next morning, when the difficulty of breathing seemed to amount to suffocation, notwithstanding the lungs appeared to be uninjured. The pulse had been flagging for some time, and the man wandered in his mind.

The *post-mortem*, twelve hours after death, showed the track of the bullet through the lower edge of the sixth rib, near its cartilaginous extremity; passing through the edge of the left lobe of the liver, it then entered the stomach on its anterior surface, about the middle of the greater curvature, passed through and made its exit near the pyloric orifice, making a large rent from its oblique direction. Thence it passed into the transverse colon, making so small an opening that it was only a mark; about two inches from this point there was another mark, but it looked so like an injury from the inside that we concluded the bullet was in the colon; but on introducing the hand into the cavity of the abdomen the missile was found lying loose near the top of the sacrum. There was but little hæmorrhage, but a large amount of bloody serum in the abdominal cavity. Towards the last hours of his life he had taken a large quantity of fluids, which must have passed directly out of the large opening; the stomach was empty.

The weapon was an eight-inch Colt's revolver; the ball a conical one weighing nearly half an ounce; yet, from all appearance, if the opening at the pyloric orifice had not been oblique there would have been no escape of the contents of the stomach or bowel.

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A brilliant success in the way of operative surgery has lately been achieved by M. Maisonneuve at the Hotel Dieu. A patient presented himself in July with symptoms of exophthalmia, which he stated had commenced a year previously, and had been progressing steadily. The ocular protrusion advanced until the organ was completely ejected from its socket, and vision lost. M. Maisonneuve, convinced that the cause of deformity was an exostosis springing from the inner wall of the orbit, by means of a V-shaped incision, the point of which lay upwards and on the middle line, entered the orbit, and, pushing aside the soft parts, reached the bony mass. This with some difficulty was removed by means of powerful forceps, and the protruded organ replaced into its natural cavity. The tumor, which sprang from the ethmoid bone, proved to be as dense and hard as ivory, ovoid in form, and three ounces in weight. The patient recovered without a bad symptom, and, strange to say, eyesight and the power of moving the globe have completely returned. "But for the slight scar on the forehead," says M. Maisonneuve in his report to the Academy of Sciences, "no one would suspect what has occurred."

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, June 10, 1868.

Dr. L. A. Voss in the Chair.

CENTRAL NECROSIS OF THIGH BONE, RESULTING IN DESTRUCTIVE SYNOVITIS OF THE KNEE-JOINT.

Dr. Krackowizer presented part of an inferior extremity, removed by amputation from a young man twenty years of age, an hotel-keeper, with the following history:—

The patient had always been in the enjoyment of good health, with no hereditary tendencies. About five years ago he was thrown from his horse, and, according to his account, sustained a fracture of the thigh about its middle. He recovered from this in due time, with a very inconsiderable amount of shortening.

On the sixteenth of January last, while driving to market, the day being extremely cold, he became thoroughly chilled, and when he arrived at home it was not until some time after that he was able to get warm. After he had gone to bed fever came on, which lasted the greater part of the night. He did not experience any pain until the following day, when it attacked his right knee, which by that time had become swollen and red. He was treated by an experienced practitioner antiphlogistically, but without much relief. The evidences of pus in the knee-joint were so unequivocal that the practicability of making an opening into it was broached to the patient, but he refused to have it done. Shortly after this an ulceration appeared on the exterior of the thigh, a little above the knee, and a large quantity of matter was discharged. From that time his health was better, so that by the end of the March following he was able to get about to attend to his business. The patient did not have any regular attendance from the time the abscess opened until the last week in April, when Dr. Krackowizer first saw him. Dr. K. found the patient pale, rather emaciated, and a little feverish; the appetite was somewhat impaired. The right leg was semiflexed and strongly rotated outwards; the head of the tibia was drawn back somewhat, so that with the fibula it made a slight prominence in the popliteal region. The hamstring muscles were somewhat tense, but there was nevertheless some degree of active and passive mobility; he could support the weight of the body upon the limb, and even walk about a little with the assistance of a cane. The appearances of the ulceration previously alluded to were such as to lead Dr. Krackowizer to suspect the existence of dead bone, though nothing of the sort could be detected by the passage of a probe through the opening. The day following chloroform was administered, and a more thorough examination of the parts made, with the assistance of Dr. Voss. The finger introduced into the wound swept freely around the popliteal space, but discovered no sequestrum. It so happened that the limb being twisted upon itself in a particular position during the course of the examination, caused a puffing out of the capsule of the joint by the admission of air, which fact proved that the external opening communicated in some way or another with the cavity of the joint. The day following the examination a pretty active inflammation was set up in the joint, and also in the dorsum of the right foot. The patient residing at such a distance from Dr. Krackowizer that it was impossible to see him oftener than once every second day, another physician was called in in his stead. The patient was not heard of until one month after. He was then very pale and emaciated, and had symptoms of hectic. The extremity was so strongly rotated outwards that the outside of the limb rested upon the bed; at the same time the foot was much swollen, of a purplish hue, and had many small sinuses, through which a great quantity of matter found an exit. The probe touched dead bone in every direction. The patient's condition not being a very favorable one for amputation, the operation was postponed for a week. The limb was removed through the middle of the thigh. On sawing through the bone at that point it was found to be eburnated and to be the situation of a sequestrum, the upper extremity of which reached further up into the cancellar structure. This rendered it necessary to saw higher up to find healthy bone, when another small cavity was found, a sort of offshoot of the original one, containing two or three small pieces of dead bone. The patient promised to do well.

The opening into the thigh extended into the popliteal space, between the tendon of the biceps and the external condyle of the femur. The posterior portion of the capsule of the joint was found ulcerated at two points. On removing the quadriceps femoris the capsular ligament was found perforated by another ulceration, which gave issue to a large quantity of matter which was accumulated between the thigh bone and the muscle. The knee-joint itself was very much disorganized, but there was no communication found between it and the sequestral cavity, leading to the inference that the inflammation resulting from the presence of the necrosed bone was by contiguity. The probable theory is that inflammation occurred in the joint and in the cancellous structure of the bone at the same time, and afterwards subsiding in a measure, was rekindled in the joint in consequence of the presence of the sequestra. There was nothing interesting in the appearance of the foot.

UNGUAL EXOSTOSIS.

Dr. Krackowizer presented a second specimen, consisting of the last phalanx of the third toe, which had been the seat of ungual exostosis. He merely exhibited it in consequence of the rarity with which it occurred in that precise situation. A great deal of pain was occasioned by the presence of the growth, and the last phalanx was amputated to afford relief.

Stated Meeting, June 24, 1868.

Dr. D. S. Conant, President, in the Chair.

RARE FRACTURE OF LOWER END OF TIBIA.—GANGRENE OF FOOT FROM TIGHT BANDAGING.—AMPUTATION OF THE LEG.

Dr. Krackowizer presented a leg and foot, removed by amputation for gangrene, the consequence of tight bandaging. The patient, a boy, 5½ years old, while at play on the fourteenth of May last, was thrown down, it is impossible to say in what manner, and sustained a very rare fracture of the tibia. He was unable to rise, and was carried into the house, and put to bed. He could raise the foot from the bed, but was unable to make any motion at the ankle-joint. His most comfortable position was with the leg flexed upon the thigh, the thigh flexed upon the pelvis.

The morning following the accident, a physician was called, who pronounced the injury fracture of the fibula, and applied a tight bandage. The boy complained of pain, and passed a very restless night. The next day the physician's attention was called to the bandage, and also to a blueness of the toes, which then existed, but he looked upon it as a trivial matter, and did not interfere. On the third night the pain was intolerable, but still the physician refused to interfere, assuring the friends that the patient would soon be all right. After the third day the patient became more quiet, the toes became darker in hue, and when at the end of the fourth day the appliances were removed, the foot was seen to be fairly gangrenous, while there were unmistakable evidences of severe constriction higher up. On the tenth or twelfth day after the injury Dr. Krackowizer was called in. The parts were then in such a condition as not to warrant an immediate amputation, and the operation was deferred until the seventh of June. Before that the ankle-joint opened, and it could then be seen that the lower epiphysis was detached and adherent to the ligaments of the foot, and that there was a crack in the bone of the tibia. There was a very oblique fracture of the tibia, commencing on the posterior aspect of the bone, and passing downwards and forwards to the line of the epiphysis—the posterior line stopping one inch above. The fibula was intact. The epiphysis of the fibula was not detached, whereas the opposite was the case with the epiphysis of the tibia. From the condition of the fracture it would be almost impossible to determine its existence from any objective symptoms. The fracture would seem to have been caused by the fixing of the foot, and then a twisting of the body from left to right, and from before backwards. Dr. Krackowizer was inclined to think that the separation of the epiphysis was not due to fracture *per se*, but that the line of fracture extended to the line of junction between the epiphysis and diathesis, and that the reparative processes necessary for a repair of such a lesion were arrested after the first eighteen or twenty hours by the occurrence of gangrene. The fracture was not compound.

Dr. Buck remarked that the variety of fracture was a very rare one. He did not think the fracture could have been diagnosticated, though it might have been suspected from the extreme sensibility of the parts, and the amount of tenderness on pressure, together with the inflammatory symptoms following the injury.

He thought, with Dr. K., that the foot had been caught and held firm, while the body acting upon the limb had given it a certain rotary motion of the leg upon the foot. He regarded the separation of the epiphysis as the result of gangrene, and not of the fracture.

CANCER OF OMENTUM ASCITES.

Dr. Krackowizer presented a second specimen, consisting of the stomach and annexa of a woman, thirty-nine years of age, who died the day before, about forty-eight hours after the operation of tapping. She was the mother of five children, the youngest being fifteen months old, and was always considered to enjoy good health, until about four months ago she began to suffer from weakness and frequent vomiting. This latter symptom became very annoying, but was somewhat relieved by the taking of slight exercise before each meal. It was not until three weeks before her death that she noticed an enlargement of her abdomen, attended with a very considerable amount of pain. Her menstruation during all this time was regular. During the week previous to the operation the pain in the abdomen was so intense that she could get no relief except by placing herself in a prone position resting upon her elbows and knees. On examination per vaginam the uterus was found anteflexed to such a degree that the vagina was nearly occluded. There was dulness on percussion all over the abdomen, from the symphysis pubis to the epigastrium. A pailful of water was drawn off, and the walls of the abdomen being thereby rendered lax, a tongue-like process was felt, which was easily recognised as the omentum in a diseased state, and the opinion was given that cancer of that organ existed, and no hope of a successful issue to the case was entertained. She sank and died forty-eight hours after. At the autopsy about a gallon of fluid was found in the abdominal cavity, and in the lower part of the pelvis; and adhering to the different organs were some shreds of recent lymph. There was cancerous deposit in almost all the peritoneal folds. The omentum, liver, gall bladder, stomach, ascending and transverse colon, and vermiform process, were all involved in the cancerous mass. A band of fibrous tissue extended across the lesser curvature of the stomach from the pylorus, and tended in a manner to prevent normal distension of the stomach.

It is stated that **Dr. Joseph Warren**, the distinguished leader in the Revolution who fell mortally wounded at the battle of Bunker Hill, was the accoucheur at the birth of Lord Lyndhurst, just deceased in England, and the venerable Josiah Quincy, of Boston, both of whom were born on the same day at Boston.

American Medical Times.

SATURDAY, NOVEMBER 7, 1863.

THE CONSCRIPTION LAW.

The great national conscription has finally terminated, and we have the general results summed up in the report of the Provost Marshal-General Fry. From this report we learn that the machinery for executing the Enrolment Act is in complete working order. The law as it stands, he states, cannot be made to develop the entire military strength of the nation, and the execution of it has been rendered exceedingly difficult by the efforts made in various ways to resist or evade it, or to escape from its operation. Its fruits, therefore, are not as abundant as they will be from a perfected law and more thoroughly established system of executing it. All the advantages, however, which could reasonably have been expected from the law are accruing.

In his opinion, its general principles distribute the burdens of military service fairly among those liable to bear them, but, he adds, there is perhaps more generosity than justness in some of its humane provisions. He advises certain modifications, which can readily be made by Congress, and then the military strength of the country may, by the direct and indirect operation of this act, be surely and cheaply brought into the field.

He presents the following statistics, with accompanying remarks, which we freely extract. Of those drawn in the present draft, including the 50 per cent. additional, over 80 per cent. have reported in accordance with the orders of the Boards. Of the 20 per cent. who have not reported, many are not wilful deserters, being unavoidably absent, at sea and the like.

Of all examined about 30 per cent. have been exempted on account of *physical disability*, about 30 per cent. have been exempted under the provisions of the second section of the act, or found not liable to military duty on account of alienage, unsuitableness of age, non-residents, etc. Those who are not liable to military duty, and form no part of the national forces, and therefore have been erroneously enrolled, appear in the general reports of the Boards among those *exempted*, because their non-liability to serve could not be established until they came before the Boards. The number of *exemptions* is thus made much larger than it really is.

About 40 per cent. of the men examined have been *held to service*, and have either entered the army in person, furnished substitutes, or paid commutation. About *one half* of those held to service have paid commutation; of the remainder about *two-thirds* have furnished substitutes, and all except a few in transit and a small proportion of deserters from among the earlier substitutes accepted are in the ranks of their regiments in front of the enemy. It is fair to suppose that most of those who wilfully fail to report, and thus become deserters, are physically fit for service; if they had been examined the proportion exempted for physical disability would have been reduced to about 25 per cent. The *proportion of exemptions* would be still further reduced by purging the enrolment lists *before draft* of all cases of manifest unfitness, and of aliens and others not liable to military duty, as may be done where this system of raising troops is well established.

The Provost-Marshal states that since the present rebellion began about 200,000 soldiers, after entering service, have been discharged on surgeon's certificate of disability. It is probable that at least one half of them were unfit for service when received.

He makes the following comparison:—In Great Britain under the system of *voluntary* enlistments the rejections average over 27 per cent. In France, from 1831 to 1842, the average number of exemptions annually was 94,860; so that, to secure the contingent of 80,000 men, 174,860 conscripts were examined. In this country it appears that of the recruits who presented themselves for enlistment in our regular army in 1852, 70 per cent. were rejected for physical infirmities exclusive of age or stature. Between first of January and first of July last more than *one half* were rejected. These were men who *desired to be accepted.* These proportions are of interest in connexion with the fact that less than *one third* of the drafted men *who desire not to be accepted* have been exempted on account of physical unfitness.

General Fry takes a flattering view of the integrity of the officials of his department. He says:—"There have been but few cases of incompetency, fraud, neglect, or abuse, in the examination of drafted men." It may be that few cases of fraud have come to his knowledge, but the air is full of rumors in the highest degree detrimental to the character of Enrolling Boards. And we regret to be obliged to acknowledge that many of those rumors, sustained by strong circumstantial evidence, implicate examining surgeons. Substitutes have been accepted with every conceivable external, and easily recognised disability. We have seen a substitute passed by a surgeon to one of our city Enrolling Boards who was upwards of fifty years of age, had the appearance of an imbecile, and who was suffering at the time of enlistment from the following formidable list of maladies, viz. 1. Epileptic seizures repeated every two or three days; 2d. Tertiary syphilis; 3. Large hæmorrhoids; 4. Stricture of the urethra; 5. Varicose veins in both legs. Such manifest dereliction of duty is disgraceful in the extreme, and merits the severest punishment. Not less unfavorably does the statement of the Provost-Marshal reflect upon our profession, that of the 200,000 men discharged on surgeon's certificate of disability one half were unfit for service when received. But we were prepared for the revelation of these facts. The examination of recruits was too loosely conducted to detect any but the most apparent disability.

In reviewing the experience which we have now gained in the examination of recruits, conscripts, and substitutes, we are inclined to believe that these examinations should be conducted by surgeons of the regular army, at least to a large extent. Whenever places of this kind are thrown open to the public the incompetent will obtain the greater number, and fraud or neglect will characterize their official duties.

THE WEEK.

One of the most painful sights that greet us in the Army, next to that of human misery, is the suffering of horses. They are subjected to over working and under feeding until no longer able to perform duty, when they are incontinently dismissed the service. Successful efforts have been made by Government to relieve the sufferings of these poor animals, and reclaim them. A large establishment has been opened at Washington for the reception and treatment of horses, where they receive the kindest treatment. It is gratifying to read the arrangements here made for the care and comfort of one of the most useful servants which we have in peace or war:—

> "The hospital, however, exceeds in completeness of arrangements, neatness, and comfort, all bureaux of this immense department, and excites not only admiration, but wonder. From an insignificant, imperfect organization, it has merged into a vast establishment, that rivals even the hospitals of our sick and wounded soldiers, and saves each month to the government thousands of dollars. The buildings have been constructed at great expense, nothing that could in any way tend to comfort and speedy cure having been omitted. Connected with each stable is a medical office, supplied with all necessary remedies, bandages, surgical instruments, etc., from which one steps out into a long passage between the stalls upon a floor of clay hardened and whitened almost like marble. Here are horses suffering from wounds of every description, some with broken ribs, some with flesh wounds from shot and shell, some with sabre cuts and bruises, while others shift about uneasily with swollen, bleeding backs, galled by the saddle, or drop their heads from debility and exhaustion. The utmost care is taken in the preparation of their food and in preserving cleanliness. Each animal has a bedding of straw or refuse hay, and is attended with the same regularity that characterizes the treatment in our city hospitals. Wide, shallow troughs are provided, into which the invalids are led and their wounds washed, and gentleness is used towards them to such a degree that each horse seems to appreciate the object of the attendants, and soon submits to the application of remedies as though he rather liked it. Great taste has been displayed in ornamenting the stables with wreaths and other devices made out of evergreens, and the stalls are kept as white as lime can make them. In the warmest weather a cool atmosphere pervades the entire establishment, and in winter one might wrap himself in a blanket and sleep as comfortably on the straw as in the most sumptuous apartment, the ventilation being so arranged that the heat thrown off from the large collection of horses can be carried out through the roof or confined at pleasure. When first established the hospital was supplied with veterinary surgeons; but their method of treatment not proving satisfactory, the old system of simple remedies and unremitting attention practised in the regular army was resumed with marked results. During a period of six months nearly fifty thousand horses were treated in this hospital, of which over one-half were reissued to the army, and during a period of three months the cures under the old style of practice exceeded those of the veterinary surgeons nearly fifty per cent. In addition to this, the enormous expenses incurred to furnish the latter with medicines (which included almost every drug and poison known to medical science) had been reduced to a very small figure, while the horses that are cured enter the field again with constitutions unimpaired by poisons, and as hardy as when purchased by the government. Improvements are constantly being made to the hospitals, and one cannot leave them without experiencing the conviction that, with the advancement in the art of destroying humanity, a new era has dawned upon the horseflesh of the Yankee nation."

The Floating Hospital in New York Harbor has proved a perfect success. When first organized it met with opposition, and was regarded as a chimerical scheme. But from the period of its first employment to the present it has fulfilled the purpose of its projectors. During its existence the Hospital Ship has been well served. The first medical officer was **Dr. Elisha Harris**, who directed its construction; the second was **Dr. A. N. Bell**, and the third **Dr. Walser**. The latter has recently made a report, from which we take the following account:—

"The Floating Hospital, for the establishment of which the credit is due to **Dr. Anderson**, of Staten Island, has been in use since 1859—the period at which the Commissioners of Quarantine abolished the Marine Hospital on Staten Island. In its construction, every attention has been paid to the supplying of the wants and insuring the comfort of the patients. The upper wards, containing sixteen beds, are well ventilated and spacious—while in the lower or main decks, thirty-four beds are ready for convalescents or persons in quarantine. The temperature during the most sultry summer days has never exceeded 84° in the upper wards, and 76° in the lower deck. Five degrees to the starboard or port, is the maximum inclination of the ship during the heaviest ground-swell; the rocking of the vessel could not be, and never was, a cause of complaint; equally unwarrantable were the apprehensions from the bilge of the vessel which, open to light and air, frequently renewed, and destitute of saccharine or other vegetable or animal matters, which in their decomposition produce the deleterious and offensive gases (sulphuretted hydrogen), scarcely differed in taste, odor, or color from the water of the surrounding bay. The principal objection, however, to the Floating Hospital, its liability to infection, urged as an almost infallible consequence by the contagionists, has happily proved erroneous, and the most pleasing anticipations of its projector have been fully realized under the most severe tests. Not a solitary case has ever occurred among the employees, notwithstanding their constant contact with the sick; and though mattresses on which some of the most virulent cases died, have been used by myself and others, not the least unpleasant occurrence has resulted from it; our only preventive being the most scrupulous cleanliness on board, and the entire exclusion of everything from infected vessels except the sick in all stages of the disease."

"Up to the present time, one hundred and eighty-five cases of yellow fever have been treated on board, or seventeen in 1859—eighteen in 1860, twenty-seven in 1861, fifty in 1862; seventy-three in 1862, with the aggregate of forty-five deaths."

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We are glad to learn that **Surgeon-General Hammond** has completed his Southern tour of sanitary inspection, and is about to return to his duties at Washington. However desirable it may be for the Chief of the Medical Bureau to visit distant military departments, nothing can compensate his absence during a long interval from the Executive chair. This is especially true when such immense responsibilities rest upon the Department, as at present. The following extract from the London *Medical Times and Gazette* shows what an impression the action of the Secretary of War in regard to the Surgeon-General makes upon the foreign mind:—

"Appointed by the President, in spite of the old routine custom, over the heads of many seniors, he came to his task full of vigor, in the prime of life, and capable of great physical endurance. With a bold hand he surrounded himself with trustworthy subordinates, displacing many whom he did not think equal to the crisis, and proceeded energetically with his work. Large armies had to be provided for, a system of military hospitals to be organized, the examining boards to be reconstructed, and an army Medical school and museum to be founded. Well, in these vast and useful works he seems to have succeeded beyond all expectation, and the confidence of the public in the new system of Medical organization has been warmly expressed, and yet, by the last accounts we learn that he has been suspended from his office, and ordered to a distant service, a commission having been appointed to inquire into the condition and management of his office. No charge against him or reason for the investigation has transpired."

Reviews.

Transactions of the Medical Society of the State of New York, for the Year 1863. Albany: 1863.

The Transactions of the Medical Society of the State of New York are increasing in value. The present volume contains many elaborate papers by prominent writers, some of which are important additions to our medical literature. The Secretary, Dr. Willard, who has done so much for these Transactions, is compelled to apologize for a few typographical errors and inaccuracies. These defects are serious drawbacks upon the volume, but we must be charitable towards the Secretary. He receives the manuscript in an imperfect condition and is compelled to run it through the press, like other government printing, without due appointment to correct proof. If the Society desires accurate Transactions it must publish the volume itself. We are, however, content to receive it in its present shape, when we recollect that in its issue it represents the power which the profession has in the State Government.

The subject of President Hun's annual address was the "Influence and Progress of Medical Science over Medical Art." We shall notice this production on another occasion, and therefore pass it for the present.

Article II.—*Remarks on Hospital Construction, with Notices of Foreign Military Hospitals*, by Charles A. Lee, M.D.—Prof. Lee remarks: "No institutions have been so abused and mismanaged as public hospitals. Originating in the purest benevolence, and supported with the most commendable liberality, they have, from faults of site, construction, and management, not only in a great measure failed in accomplishing the objects in view, viz. the recovery of the largest number of sick men in the shortest possible time, but they have even aggravated the very evils they were designed to remove."

The design of the paper is to show the importance of the pavilion hospital. He first alludes to the English commission of inquiry into the condition of the military hospitals: "It is well known that this commission not only effected many most important reforms in the existing barracks and military hospitals of Great Britain, but that it has brought about, also, a complete change in hospital construction, ventilation, and management. When they commenced their labors, the general hospital at Dublin, and the Fort Pitt general hospital, were the only two military hospitals in the United Kingdom in which the pavilion structure had been followed (the latter very defective, inasmuch as the windows were at the ends instead of the sides of the walls); now, the pavilion or block plan, is the only one recognised as suited for hospital purposes, whether general, regimental, or camp or temporary hospitals."

He gives at some length the leading ideas in the organization of military hospitals in England, with the description of several hospitals. The tendency now is strongly to the pavilion hospital. The continental hospitals described at length are the Military Hospitals at St. Petersburg, at Verona, and at Rome. The paper closes with a circular memorandum from the War Office, London, for the guidance of Royal Engineers in the erection of hospitals. The paper is illustrated with diagrams of the hospitals examined. The paper of Prof. Lee is very valuable at this time. It places in an accessible form the latest views of the Europeans in regard to the construction of hospitals for soldiers.

Article III.—*On the Mechanical Treatment of Pott's Disease of the Spine.* By Charles F Taylor, M.D., of New

York.—The design of the paper is to illustrate the author's method of treating the disease by mechanical appliances.

Article IV.—*On Medical Provision for Railroads. Supplementary paper: containing also an analysis of the Bill entitled, "A Bill to provide compensation to passengers for injuries sustained on the railroads of the State; also to provide surgical stations and hospital accommodations on the railroads of the State," read before the surgical section of the New York Academy of Medicine, October 24, 1862.* By E S. F. Arnold, M.D., M.R.C.S.E., of Yonkers, Resident Fellow of the Academy. This article is the sequel of an article presented to the Society last year, and published in the Transactions of 1862. In it the author sets forth at length the argument in favor of proper provision for the care of the injured in railroad accidents, and the efforts to obtain legislative enactments. The subject is one of great importance, and ought to enlist the cordial co-operation of the profession. It has been so fully discussed in this Journal that we need not review the present paper.

Article V.—*Remarkable Case of Deception. A woman professing to secrete nothing but charcoal and stones for a number of years, all the natural functions being arrested. And the deception unmasked.* By Lewis A. Sayre, M.D., of New York.—This was one of those disgusting cases of attempt at deception by a hysterical woman which creates such interest among the people. The poor creature seems to have entirely deceived one or two physicians.

Article VI.—*De Lunatico Inquirendo.* By Julius Auerbach, M.D., of Queens Co.—Dr. Auerbach proposes to the Society the study of the jurisprudence of insanity with reference to an improvement of our laws.

(*To be Continued.*)

Resignation of Prof. H. H. Childs.—At a meeting of the Trustees of the Berkshire Medical College, Henry H. Childs, M.D., the President of the institution, as well as its founder and father, resigned the Professorship of "Obstetrics and the Diseases of Women and Children," which he has held so many years. For nearly forty years he has been the active head of the Berkshire Medical College—his usefulness having extended to a period almost unprecedented. During these years, by his energy, zeal, and enthusiasm, he has achieved a widespread reputation as a medical man, and by his kindness of heart and courtesy of manner, a no less deserved name as a Christian gentleman.

Treatment of Pneumonia by Acetate of Lead.—Professor Laudet, of Rouen, in this paper gives the results of his employment of the neutral acetate of lead in 40 cases of pneumonia in Hospital patients, for the most part of weak constitutions. Of these, 37 were cured and 3 died. The dose employed varied from a minimum of 1½ grain to a maximum of 12 grains per diem, the total quantity of the salt administered during the whole period of treatment varying from 7½ to 78 grains, the mean quantity having usually varied from 30 to 60 grains. It was always given in pills, and the mean duration of its employment was six days. The mean duration of pneumonia treated by lead was twelve and a half days. In more than one half the cases the lead gave rise to diarrhœa. At the commencement of the treatment the author recommends that the dose should be from 6 to 9 grains per diem, which induce a rapid and persistent depression of the pulse, and lead to a speedy resolution. Convalescence under this treatment is of speedy occurrence, the appetite being restored as soon as the fever has disappeared, even when resolution has not advanced. Strength is rapidly recovered.—*Bull. de Thérap.*, vol. lxiii., pp. 385–394.

L'Imparziali relates that a woman at Florence lately produced four children at a birth. The placenta was single, and had attached to it four cords.—*Brit. Med. Jour.*

Army Medical Intelligence.

A MEDICAL CORRESPONDENT

IN THE ARMY OF THE POTOMAC.

[Several interesting letters have appeared in the London *Medical Times and Gazette* from a correspondent in the Army of the Potomac. The following contains so many facts of general interest that we extract it.—Ed. Med. Times.]

"Regimental Surgeons have nothing whatever to do at present. One reason, because few cases of sickness occur; another, the principal one, because when a man does get so ill as to be unfit for duty, he is immediately sent to the Hospital of Division by order of the Medical authorities. This Hospital is established near the camping grounds of the Ambulance Corps. It consists of a dozen Hospital tents under the shade of a huge arbour which the ambulance men have constructed over them. It is a very quiet place, and the patients seem comfortable and clean; they have plenty of attendants, plenty of supplies. There are no iron bedsteads, such as are common in military Hospitals further from the front, but the stretcher makes a useful substitute in the field. A Surgeon with one assistant is detailed in charge. This plan of collecting the sick of a division near the ambulances has proved very useful in the late campaign. There is not a sick soldier in the camp of any regiment; all are inmates of this Hospital. If, then, an order arrived directing us to march immediately, we would have no trouble with our sick. The regiments fall in and march off, and by the time they are in motion the men unfit for duty are lodged in the ambulances, which then bring up the rear of the column, so as to pick up those who fall out exhausted or footsore. At evening the tired men rejoin their regiments, and a night's sleep prepares them for the march next morning, while the sick men, if the movement is to be resumed on the morrow, pass the night in the wagons, but if a halt of a day or two is anticipated the tents are pitched, the stretchers made to do duty as beds, and an impromptu Hospital is formed. The Regimental Surgeons have thus nothing whatever to do except when a man gets sick to see him safely despatched to Hospital. The plan answers very well now when we have but two or three thousand men in our decimated divisions; but when the conscription has filled up our ranks to their normal strength of fifteen or twenty thousand men, every Surgeon shall have, I presume, to attend to his own men. Regimental Hospitals will be re-established, and that of the division broken up, on account of being then too large an affair to work smoothly in the field. Just now in these Hospitals there are but few patients, and the number of those affected with acute diseases is very small; the majority are men who, as the expression is here, have got 'used up' on the late marches, and who are now regaining strength on good diet, quinine, and whiskey.

"When one puts the question to himself—Why have the Medical authorities, by the establishment of these Hospitals in each division, taken the direction of the cases of disease entirely out of the hands of the Surgeons in charge of regiments? it is difficult to arrive at a satisfactory answer. Is it on account of the utility of the arrangement when the army is in motion? Perhaps the idea was originated with that end in view; but why continue the institution now that the troops are quiet in camp? The patients cannot have better attention paid them by nurses, strangers to them perhaps, in Hospital, than by men, their comrades, detailed to the Hospital Department of their own regiment. They cannot be better furnished with supplies than they would be if in charge of their own Medical men, since division and regimental Hospitals are equally distant from the base from which those supplies are derived. They would have the same air, the same water, and an equally salubrious camping ground in the one case as in the other. It is not to prevent the spread of disease among us by contagion that the sick are in some measure removed from us, for we have no contagious diseases; and the smallness of the percentage of sick negatives the supposition that their removal was intended to prevent any depressing influence their presence might occasion among the troops. Dare we look, then, to the regimental Medical officers themselves for an explanation? Is it that the authorities, who, by the recent suppression of the use of calomel and tartar emetic, showed the distrust they had of the capabilities of these gentlemen, have come to the conclusion that it would be of more benefit to the service for them to lock their medicine chests and turn over their sick for tendance to a man of tried Professional qualifications—the Surgeon in charge of the division Hospital. This is an ugly view to take of the matter, but one is at liberty to look so at it when, knowing that there are men sick, one sees, and has seen for four weeks past, regimental Hospitals deserted, their stewards unoccupied, their attendants drawing rations from their companies instead of on Surgeon's requisition, and their Medical men seating themselves quietly to breakfast while sick call is being beat, aware that it now is but an empty sound. The arrival of the conscripts will, I think, as I said before, put an end to this state of matters. These unwilling patriots, or their substitutes, are already joining us, although as yet in but small detachments. An order has been issued requiring Surgeons to examine and report on the physical condition of every man sent to join their commands. If this order be rigidly carried out it will save an immense amount of expense to Government, and of subsequent trouble to the Surgeons themselves. When this army was first organized, examining Surgeons were very careless, or duped perhaps by roguish recruiting officers. Almost every one who volunteered was accepted, and the consequence was when active service commenced a heavy bill of sickness and mortality. The Surgeons then in the field felt sorely the necessity for a strict examination of recruits, and now, having themselves that duty to perform, it may safely be augured that the physique of the conscript will be far superior to that of the volunteer army when it first entered the field.

"In a late number of the *Medical Times* which reached me, I observed some remarks of yours on the volunteer Surgeons of America, *apropos* of the proscription of calomel and tartar emetic by the Surgeon-General. I have not the article beside me, but I think you jocularly predict that the next edict will be that no more field instruments are to be issued, and that those already in the possession of army Surgeons are herewith ordered to be turned in, since the Surgeon-General believes that the country has derived more harm than benefit from the indiscriminate use of these edged tools. Well, the majority of Surgeons in this army since the battle of Antietam in September, 1862, have been as thoroughly cut off from the use of the amputating knife as if such an order had actually been published and stringently insisted upon.

"Since this civil war has lasted, now two years and a-half, since so many great battles have been fought, and since time and opportunity have been afforded the Surgeons for familiarising themselves with the diseases common in camp, it might be said that surely they now ought to be able to treat skilfully most of the cases which fall under their observation; and, undoubtedly, those who have had these advantages are so. But men who have been in the field since the first outbreak of the rebellion are rarities in camp. There is a continual change going on in the constituents of the Medical force, which prevents it from improving as a body, although the members of it are daily being taught lessons by experience. It is very unfortunate that the army cannot retain in its service the Surgeons it has made. The force, I think, during the last six months has deteriorated, the skill and attainments lost to it by men leaving the ranks having been greater than the additions brought by those who fill the vacancies. Many Medical men come out, and after a few months' trial of soldiering, get tired of it, just at the time, perhaps, when experience has begun to render their services of value. Others spend a longer or shorter period with the army, when they become prostrated by sickness; they obtain a short leave of absence to recruit their health, and the home comforts they then experience contrast so strongly with the fatigues and privations of camps and campaigns, that when recovered they have not moral courage sufficient to enable them to undertake a return to the field. Others enter the service with the intention of leaving it again after a short time, their object being simply the possession of the commission which they intend using as a reputation trap to snare patients. It was only the other day that, in looking over the advertisement sheet of the *Herald*, I observed a notification to the public of New York city that So-and-So, late Surgeon of the Such-and-Such regiment, had resumed the practice of his Profession, etc. Again, a number of the Surgeons attached to the nine months' and two years' regiments did not return to the army when mustered out, in consequence of the disbandment of their commands at the expiry of their term of service. But the greatest loss the Surgical force in the field has suffered has been caused by the institution of the United States Corps of Volunteer Surgeons. The members of this body are commissioned by the President, and are employed as Surgeons of Divisions, Medical Directors of Army Corps, or are attached to the various military hospitals now so common throughout the country. No inefficient men belong to this corps—that of the U.S.V., as it is termed—the searching examination to which they are subjected before being commissioned obviates all chance of the admission of any but those possessed of superior talents. The Surgeons in charge of regiments hold their commissions from the Governor of that State which has furnished the troops to which they are attached, and their duty is to be with their commands wherever stationed. Now, although the pay in both services is the same, the superiority of the position attracts the best talent in the field to the ranks of the U.S.V. corps. The men who come from civil life to fill the vacancies are but poor substitutes for those we lose. Good men come, as may be supposed, but the proportion of indifferent Practitioners is very large. They are young men of no experience, and of superficial education from the schools; men good, bad, and indifferent from the cities, who, having but poor practices, attempt to better their fortunes by going a-soldiering; men from the country, whose duty for years previously had been to attend midwifery cases. A few creep into the service, too, possessed of no papers but the commission which by some means they have managed to obtain, such as dentists and druggists who have read perhaps a little. But the purest example of ignorance commissioned in the American Medical Service that I have yet met was in the person of one who might have been styled a political Surgeon. The case, I believe and hope, is unique. He had been a politician. He had represented a county in a certain State during the previous session, and to reward him for party services, probably, he had received the appointment. He knew nothing of Medical science, nor of any other science whatever. He was very illiterate. It amused me to look over the books of the regiment, as kept by him. From his Register I learned that *diorhe*, *rhumatism*, and *chills* and *fever* were the only diseases of which he was cognisant, with the exception of one case of *sore leg*. His prescription-book showed that, in his opinion, the compound cathartic pill of the U. S. Pharmacopœia, or, as he ordered it, *pill cat. co.* iii., was a specific for all the diseases to which the soldier is liable. His ignorance was too gross for him to be able to keep up appearances for any time, and on a gentle hint having been dropped him concerning the existence of a Board of Examiners at Washington, he took sick, and found not the least difficulty in having his resignation—based upon his ill-health—accepted."

REPORT OF THE BOARD OF HOSPITALS.

Washington, D. C., Oct. 12, 1863.

Colonel:—We have the honor to report the completion of the duties assigned to us by your instructions of July 9, 1863, and to submit for your information the general results of our examinations of soldiers for the invalid corps.

Our examinations have been very thorough, and have extended to all ward-masters, cooks, nurses, clerks, bakers, butchers, and assistant-apothecaries; to soldiers in charge of commissary, quartermaster, and medical supplies, and to guards as well as to convalescent and other patients not under medical or surgical treatment.

According to the results of the examinations the soldiers were ordered for duty in their respective regiments, for transfer to the first or second battalion of the invalid corps, or recommended for discharge from the Army. *Doubtful* cases were ordered to be retained in hospital for further observation and treatment, the PROBABLE result in each case being indicated in the column of remarks by the words "Regiment," "Invalid Corps," or "Discharge."

It will be seen at once that after the thorough examination above indicated, if the orders were carried into effect *immediately* the hospital would be stripped of all its efficient force, and none (aside from officers) be left except really sick and those whose wounds were not sufficiently healed or health sufficiently restored to go to duty or into the invalid corps.

This difficulty was met in the following manner: the examinations and decisions were first made without reference to the wants of the hospital. The surgeon in charge was then invited to examine the list for the first battalion, invalid corps, and designate the men who were required for service in the hospital, and all men so designated were at once transferred to the list for the second battalion. That officer was then requested to examine the list of soldiers pronounced fit for duty in the field, and he was authorized to retain in hospital all the men on that list marked by him as essential to the administration of the hospital, "until he could supply their places by convalescents not fit for field service, or by detail from the invalid corps," and this he was required to do as soon as possible.

This list of "men essential to the hospital" was confined to men skilled in putting up medicines, trusty men charged with the custody and issue of public property, skilful surgical nurses, clerks, bakers, butchers, and chief cooks.

In all the hospitals we have examined we have found a large proportion of the ward-masters, cooks, nurses, and clerks, unfit for field service, and very many not even proper subjects for the first battalion. The guards were generally the most able-bodied men about the hospital.

Notwithstanding this general fact, some men are retained in hospitals who are fit for active field service, but the numbers are comparatively small; far too small to account for the complaints which are made concerning the non-return of soldiers to their regiments. We think that many more men are reported for duty before they are fully able to bear the labor and exposure of field service than are unduly retained in hospital.

We find that soldiers "reported for duty" are not sent from the hospitals direct to their regiments, as is required by the War Department, Special Orders, No. 89, current series, but that large numbers are retained for various duties in cities, and that those from the hospitals in the New England States first pass through the convalescent hospital at Bedloe's Island, New York harbor, and *all* are sent to the convalescent camp near Alexandria, Virginia. In very many instances months elapse between the soldier's leaving the hospital and his joining his regiment—months that are passed in service disagreeable to the true soldier, who prefers his regiment, and affording time for the indolent and malingerer to be returned once more to hospital. Some men have passed the greater portion of their enlistment in travelling from hospitals to convalescent camps and from convalescent camps to hospitals.

If it can be so arranged that men may be conducted from the convalescent hospital in each city to their regiments without detention and re-examination in convalescent camps, the armies in the field will be greatly strengthened; but if this be done, justice to the soldier requires that medical officers be enjoined to report none for duty who have not been carefully inspected and found fit for the field. We are satisfied that at present many men are reported for duty who are not in condition for the field, and that this is so, is evident from the number of men transferred to the invalid corps at the convalescent camp near Alexandria.

In the performance of the duties assigned to us we have kept steadily in view that the first object in importance was the return of able-bodied men to their regiments, and next so to organize the invalid corps as to interfere as little as possible with the administration of hospitals. We have taken pains to instruct medical officers as to the manner of completing the companies of the second battalion, so as in time to form a satisfactory hospital corps, by adding men qualified for hospital service, and discharging those found physically unable to perform any duty.

The following table exhibits the results of the examinations made by the Board of Hospitals before as well as subsequent to the relief of Colonel D. B. Sacket as a member of the Board:

Locality.	For duty in Regiments.	For First Battalion, Invalid Corps.	For Second Battalion, Invalid Corps.	For further Observation and Treatment.	For Discharge from the Army.	Total.
Washington	584	459	199	514	7	1763
Burlington	14	8	9	30	3	64
Brattleboro'	18	41	24	43	4	130
Boston	1	3	4	2	1	11
Portsmouth Grove	205	211	126	285	37	864
Hartford, Norwich, and New Haven	11	64	47	23	0	145
Newark	63	29	35	127	4	258
Chester and Philadelphia	538	509	476	370	57	1950
Wilmington and Baltimore	543	369	204	244	20	1380
Camp Convalescent, Virginia	481	477	72	116	16	1162
Total examined	2458	2170	1196	1754	149	7727

We are constrained to report that we have not found one medical officer fully acquainted with the General Orders governing the organization of the invalid corps, nor have we found in any hospital a complete "Invalid Roll." Our examinations have, therefore, in many cases, been extended to a complete inspection of all the soldiers in hospital, instead of being confined to "convalescents, and men fit to leave the hospital, and supposed to be able to go to duty."

Very respectfully, your obedient servant,
Geo. W. Gile, Colonel Invalid Corps.
R. H. Coolidge, Med. Ins., U.S.A.

Colonel James B. Fry,
Provost Marshal-General, U.S.A.,
Washington, D. C.

ORDERS, CHANGES, &c.

Upon the recommendation of a Board of Officers, instituted by Special Orders 294, July 3rd., 1863, from the Adjutant-General's Office, the following officers are hereby discharged the service of the United States, on account of physical disability, with condition that they shall receive no final payments, until they have satisfied the Pay-Department that they are not indebted to the Government.

Surgeon J. P. Wilson, 5th Michigan Cavalry.

Assistant-Surgeon W. R. Fitch, 82d New York Vols.

Leave of absence for thirty days has been granted to Acting Assistant-Surgeon M. A. Booth, U.S.A.

Assistant-Surgeon B. F. Brownfield, 3d Pennsylvania Heavy Artillery, having been examined by a Board of Medical Officers, and an adverse report thereof, in his case, having been approved by the President, is hereby discharged the service of the United States.

By direction of the President, Assistant-Surgeon R. L. Braden, U.S.V., is hereby discharged the service of the United States, on account of physical disability.

By direction of the President, Surgeon W. W. Holmes, U.S.V., is honorably discharged the service of the United States, in accordance with General Orders No. 100, August 11, 1862, from the War Department.

Leave of absence for twenty days has been granted Assistant-Surgeon A. Waterhouse, 7th Maine Volunteers, on Surgeon's certificate of disability.

Assistant-Surgeon Alfred Woodhull, U.S.A., has been ordered to report in person without delay to Surgeon Charles Sutherland, U.S.A., Medical Director, Department of Virginia and North Carolina, at Fort Monroe, Va.

Assistant-Surgeon C. C. Lee, U.S.A., now on duty in the Douglas Hospital, has been ordered to report in person without delay to the Surgeon-General, U.S.A., to relieve Surgeon E. T. Whittingham, U.S.A.

Assistant-Surgeon Cyrus Bacon, U.S.A., will report in person, without delay, to Surgeon J. Simpson, U.S.A., Medical Director at Baltimore, for duty. As soon as his health will permit, Assistant-Surgeon Bacon will rejoin his station in the Army of the Potomac

Surgeon E. F. Bates, U.S.V., has been relieved from duty as a member of the Army Medical Board for the examination of Assistant-Surgeons of Volunteers, now in session in Washington, D.C., and Surgeon Thomas Antisell. U.S.V., has been assigned to duty as a member of said Board in his place. On being relieved, Surgeon Bates will resume his duties at the Carver Hospital near this city.

Assistant-Surgeon Joel Morse, 7th U.S. C. Troops, has reported for duty with his regiment at the Birney Barracks, Baltimore, Md.

Assistant-Surgeon Spears, 3rd U.S. C. T. was captured by the rebels at Crawfish Springs, Georgia.

Leave of absence for ten days has been granted to Assistant-Surgeon C. M. Worthington, U.S.V.

Surgeon Joseph R. Smith, U.S.A., has arrived at Little Rock, Ark., and has relieved Surgeon J. C. Whitehill, U.S.V., as Medical Director of the Army of Arkansas.

A Board of Officers, to consist of Lieut.-Colonel R. H. Coolidge, Medical Inspector, U.S.A., and Lieut.-Colonel Oscar V. Dayton. Invalid Corps, is hereby constituted for the purpose of examining all convalescent patients and enlisted men on duty in General Hospitals and Convalescent Camps, for the purpose of organizing the Invalid Corps. and of designating to the Surgeon in charge, those men who are fit for duty or proper subjects of discharge, in accordance with General Orders No. 308, War Department, 1863. In performance of this duty the Board will visit such General Hospitals and Convalescent Camps as the Provost-Marshal-General may from time to time direct, and will be governed by his orders and instructions.

Surgeon H. S. Hewit, U.S.A., has been ordered to proceed without delay to Nashville, Tenn., and report in person to the Medical Director, Department of the Tennessee, for duty.

By direction of the President, Assistant-Surgeon G. McFarland, 7th Illinois Volunteers. has been dismissed the service of the United States.

A Board of Officers to consist of Surgeon Wm. J. Sloan, U.S.A., Captain R. C. Morgan, Assistant-Quartermaster of Volunteers, and Assistant-Surgeon J. W. S. Gouley, U.S.A., will assemble at New York city as soon as practicable. for the purpose of examining and reporting upon what portion of public property at the McDougall Hospital at Fort Schuyler, New York, shall be transferred to the De Camp General Hospital, David's Island, New York. The junior member will record the proceedings.

Permission to remain in New York city, awaiting orders, has been granted to Surgeon Lincoln R. Stone, 54th Massachusetts Vols.

Upon recommendation of a Board of Officers, instituted by Special Orders 294, July 3, 1863, from the Adjutant-General's Office, Assistant-Surgeon J. H. Hassenpflug, 109th Pennsylvania Vols., has been honorably discharged the service of the United States, with condition that he shall receive no final payment, until he has satisfied the Pay-Department that he is not indebted to the Government.

The resignations of Surgeons Wm. H. Church and J. H. Wythes, U.S.V., have been accepted by the President, to take effect October 26, 1863.

The verbal orders given Surgeon James H. Thompson, 12th Maine Vols., by the Surgeon-General, U.S.A., to await orders in Washington city, have been confirmed.

Surgeon A. T. Augusta, 7th Regiment, U.S. Colored Troops, has been detached from his regiment and ordered to report in person without delay to Colonel William Birney, 2d U.S. Colored Troops, Recruiting and Mustering Officer, for duty as examining Surgeon at the Recruiting Rendezvous for Colored Troops, Baltimore, Md.

Leave of absence has been granted to Surgeon D. Baguley, 1st Virginia Volunteers, for twenty days.

Surgeon J. A. Lidell, U.S.V., has returned from leave and resumed charge of the Stanton Hospital, Washington, D.C.

Surgeon S. D. Freeman, U.S.V., has been granted leave to visit his home on important private business.

Surgeon G. F. French, U.S.V., has been assigned to duty in General Hospital, No. 3. Vicksburg, Miss

The 20th and 21st Army Corps having been consolidated into the 4th Army Corps, Surgeon A. J. Phelps, U.S.V., late Medical Director of the 21st, has been assigned to duty as Medical Director of the new Corps.

Surgeon E. F. Sanger, U.S.V, has arrived in New Orleans and been assigned to duty in the field with the 19th Army Corps.

Surgeon John C. Dalton, U.S.V, has been assigned to duty as attending Surgeon on sick and wounded officers of Volunteers, and as Medical Director of Transportation in New York city.

Surgeon R. H. Gilbert, U.S.V., has been assigned to duty in the office of the Medical Director at Philadelphia, Pa.

Medical Purveyors have been ordered not to pay contract physicians upon termination of contract, until they present a notification from the Surgeon-General's Office of the final settlement of their accounts.

Assistant-Surgeon Henry Rockwood, 15th Regiment Massachusetts Vols., tried for conduct unbecoming an officer and a gentleman, and conduct prejudicial to good order and military discipline: found guilty of the charges, and sentenced to be dismissed the military service of the United States. (G. O. 89, Headquarters Army of the Potomac, Sept. 14, 1863.)

Medical News.

At the Statistical Congress recently in session at Berlin it was proposed to form permanent international societies for the relief of the wounded in time of war.

A Convalescent Camp has been ordered to be established at St. Augustine, Fla., for the benefit of the soldiers of the Southern department who require change of climate.

The late Col. Chas. R. Ellet, commander of the infantry to the Miss. Marine Brigade, was a student of medicine on the breaking out of the war. He was born in Philadelphia, about the year 1840, and was the son of the noted engineer, the late Colonel Ellet, the originator of the famous ram fleet.

Increase of Typhus in the Metropolis.—We hear that a large increase has taken place during the last two months in the typhus cases admitted at the London Fever Hospital. The cases, we believe, are generally from the eastern districts of London. It is reported that the number of cases treated has more than doubled since August 1.—*Med. Times and Gaz.*

The *Journal of Psychological Medicine*, which was established in 1848 by Dr. Forbes Winslow, and has since then appeared under his able editorship, is to be discontinued—at least, in its present form. In an amiable and kindly spirit, Dr. Winslow lays down the editorial *bâton*, which he has so long wielded to the satisfaction of his numerous readers.—*Brit. Med. Jour.*

More Deaths in Central Africa.—Dr. Dickenson died on March 17, from an attack of malignant bilious fever. Mr. Richard Thornton, a geologist, attached to Dr. Livingstone's expedition, died of dysentery and fever on April 21. Dr. Livingstone, in a letter to Sir R. Murchison, says, "the scene of desolation around us reacts on my health badly."—*Med. Times & Gaz.*

The Opening of the Session at Netley.—Upon the 1st inst. the Medical session at the Army Medical School was opened by an Introductory Lecture from Professor McLean at the Royal Victoria Hospital, Netley. The number of Medical candidates is thirty-three, and, besides the numerous medical officers, there was a good sprinkling of the civil element present.—*Med. Times & Gaz.*

Mr. Barwell, of London, in a lecture on hip-joint disease, makes the following accusation against Prof. Gross: —"This plate is *borrowed* from my work on joint diseases. A similar word will hardly characterize its use by Dr. Gross, of Philadelphia, who in the recent edition, second edition of his 'System of Surgery,' has appropriated this and six other of my illustrations without acknowledgment."

M. Reybard's conclusions, in the late discussion on urethrotomy, in the Surgical Society of Paris, are: 1. When the stricture interferes with micturition, is superficial, and of small extent, it may be simply incised. In this way, we obtain a temporary result, which may be also obtained by dilatation; but which is obtained more rapidly by incision, and without accidents. 2. In other cases, where a radical cure is desired, we incise superficially, and dilate largely, once only; this proceeding is expeditious, and gives definite results. M. Reybard obtained, in fourteen cases, fourteen cures without accidents. 3. Deep strictures must be incised largely; and the operation is serious, on account of the deep nature of the incision required. In this deep urethrotomy, M. Reybard has often observed accidents, but has only lost one patient in seventy.—*Brit. Med. Jour.*

Original Lectures.

LECTURES ON
THE MORBID CONDITIONS OF THE BLOOD.

DELIVERED AT
THE BELLEVUE HOSPITAL MEDICAL COLLEGE.
PRELIMINARY TERM, SESSION OF 1863–4.

By AUSTIN FLINT, M.D.,
PROF. OF THE PRINCIPLES AND PRACTICE OF MEDICINE.

LECTURE IV.

Formation of Coagula in the Heart and Vessels.—Embolia.—Thrombosis.—Morbid Conditions relating to Albumen.—Diminution of Albumen in Albuminuria.—Relations of this Condition to Dropsy.—Morbid Conditions relating to Water in the Blood.—Hydræmia.

Thus far reference has been had chiefly to coagulation of the blood withdrawn from the body. It may take place in the body, *first*, after having been effused, *i. e.* outside of the vessels, and, *second*, within the vascular system. Blood extravasated into serous cavities, upon mucous surfaces, and into the substance of organs, may form coagula or clots. These will enter into the consideration of the individual diseases which involve hæmorrhage into the different situations just named. But coagulation within the vascular system may be briefly considered in this connexion.

Coagulation may take place during life in the cavities of the heart and in the vessels. Certain of the concretions or vegetations, so called, which are found on the valves and at the orifices of the heart, consist of fibrin deposited, not exuded; in other words, they are small coagula derived from the blood within the cavities. This takes place when the surface at certain points is roughened by the exudation of lymph, or by the deposit of atheroma or calcareous matter. Perhaps it may occur without any previous alteration when the blood is surcharged with fibrin, as in cases of acute articular rheumatism. It occurs in endocarditis, being due in part to the roughening of the membrane by exudation, and in part to the excess of fibrin in the blood. These small coagulated deposits are found in the left cavities of the heart especially, since inflammation and valvular lesions are of much more frequent occurrence in these than in the right cavities, and arterial blood contains more fibrin than venous blood.

The fibrin deposited in the manner just stated may accumulate so as to form masses as large as a pea or bean or even a filbert. They occasion obstruction in proportion to their volume and weight, and they are liable to be torn off by the current of blood, and carried into the circulation. They constitute then *emboli*, or plugs, which carried along the arterial branches with the flow of blood, at length reach a situation where the size of the vessel prevents their passage. Arrested at this situation they obstruct the flow of blood, and may thus give rise to pathological effects dependent on the sudden interruption of the circulation in the parts to which the obstructed vessel is distributed. Much attention of late years has been directed to this source of arterial obstructions, called embolia or embolismus. Apoplectic seizures and paralysis are sometimes attributable to an obstruction of an important cerebral artery thus produced. Emboli or plugs have been found after death fixed in arteries of the brain and in other situations, which have been found to be similar, as regards their gross and microscopical characters, to co-existing fibrinous deposits within the cavities of the heart.

Coagula in greater or less abundance are usually found in the cavities of the heart after death. These have been called "death polypi;" they are found especially in the right cavities, because the blood accumulates in greater quantity in these cavities. These coagula are in general formed either after death or during the act of dying, but they may be formed during the progress of diseases, and a sudden and unexpectedly fatal termination in certain cases is due to their formation. The accumulation of blood in the right cavities in some cases in which the heart becomes largely dilated may lead to coagulation, and sudden death occur in consequence. So, when the action of the heart is nearly, or for a brief period quite suspended in syncope, this may sometimes occur. It is in this way that Prof. Meigs explains certain cases of sudden death occurring after parturition. The occurrence is a species of accident which may take place in various diseases which may involve over-accumulation of blood in the heart-cavities, weakness of the ventricular contraction, an overplus of fibrin, or a condition of the blood favoring coagulation of the fibrin. In pneumonia it occurs not very infrequently, owing to the high degree of hyperinosis, and the obstruction to the pulmonary circulation.

Can the coagula found in the cavities of the heart under the circumstances just stated be discriminated from those found after death or during the act of dying? The loose, friable, dark coagula so often found are post-mortem formations. And if the fibrin be isolated, but soft, not adherent, not closely intertwined with the papillary muscles and tendinous cords, it may have coagulated during the last moments of life. But if the fibrin be isolated from the red globules, dense, adherent, or closely intertwined with the papillary muscles and tendinous cords, the coagulation has probably taken place at a period more or less remote from the act of dying, and the fatal termination may be attributable to it. The sudden occurrence during the progress of a disease, more especially pneumonia, of great irregularity and feebleness of the heart's action, with dyspnœa, oppression, anxiety, death taking place after the lapse of a few hours from the notable change in the symptoms, and no other cause for the change being apparent, should lead to a strong suspicion of the occurrence of this accident.

The liability to this accident in pneumonia and other diseases, suggests, of course, the inquiry whether measures to guard against its occurrence are available. Why the fibrin retains the liquid state within the vascular system has long been a mooted and obscure question in physiology. Recently Dr. Richardson, of London, has endeavored by a large number of ingenious experiments to show that it is due to the presence of ammonia in the blood. Accepting this explanation as probably true, ammonia is now frequently given as a remedy with a view to maintain the liquidity of the fibrin in the blood, in cases in which there may be reason to fear the formation of heart-clots.

Coagulation may take place in the blood-vessels. It occurs in aneurismal dilatation of arteries. The sac in aneurism is frequently lined with successive layers of dense fibrin. The coagulation is here due to accumulation and stasis of blood. It occurs in phlebitis. The inflammation occasions a coagulum either from the direct action of the inflammatory products on the blood or by altering the condition of the interior surface of the vein, or by both effects combined. The inflamed vein is frequently filled by a clot, and may be permanently obliterated. This occurs in the affection known as phlegmasia dolens. Coagulation in the cerebral sinuses is supposed to be a cause of serious disorder of the intra-cranial circulation in some cases, giving rise to hæmorrhage and serous effusion. Coagulation in the small vessels of the lower extremities is an element in dry gangrene or gangrena senilis, due to weakened circulation and a morbid condition of the arteries. In cachectic persons coagulation may take place in the deep-rooted veins of the extremities, or within the pelvis, without phlebitis. The pressure of a tumor upon a vein may cause stasis sufficient to give rise to coagulation. The immediate effect of coagulation in a vessel is obstruction to the circulation according to the size and situation of the vessel. And s consequences of this obstruction arise œdema, coldness, weakness of the parts, wasting, and sometimes gangrene. The presence of the clot sometimes excites local inflammation and suppuration, acting like a foreign substance. In some instances the formation of a coagulum leading to obliteration of a vein may be useful, as in cases of varicocele, hæmorrhoids, and varicose veins of the extremities. Coagula forming in veins either from phlebitis, or other causes, may be carried along with the current of blood, or fragments may be separated and transported, and, passing into the right cavities of the heart, be driven into the pulmonary artery, and give rise to obstruction of this vessel or its branches. Sudden death may be produced by a mass of fibrin sufficient to cause plugging of the pulmonary artery, and local inflammation with suppuration may occur from the presence of smaller masses in the branches of this artery. This variety of embolia has been called *thrombosis*, and the movable plugs thus derived from the veins are called *thrombi*. It will be seen that emboli found in the left cavities of the heart, or in the arteries, produce obstruction in the arterial tree of which the aorta is the trunk, while the emboli found in the veins, or thrombi, produce obstruction in the pulmonary arterial system.

Having considered the pathological relations of fibrin, I pass to the other of the two most important organic constituents of the liquor sanguinis, viz. *albumen*. This exists in the serum of the blood after the separation of fibrin. It exists normally in a liquid state. It does not, like fibrin, coagulate spontaneously, but may be coagulated by heat or the addition of mineral acids, and is then presented as a white deposit. It is found also in chyle, lymph, dropsical effusions, and in various fluids of the body. It is much more abundant in the blood than fibrin, existing in the proportion of 60 to 70 parts in 1000. The serum of the blood owes to it much of its density, which in health is represented by about 1030. Albumen is doubtless a very important constituent of the blood, but its precise physiological uses and relations are not satisfactorily ascertained. There is reason to believe that it furnishes the pabulum for the development and renewal of the organized or corpuscular constituents, and it undoubtedly constitutes the material for the nutrition of many of the tissues. It has been supposed that the fibrin is formed from the albumen. The two substances are nearly identical as regards their chemical composition.

Albumen is increased in certain diseases, viz. acute rheumatism, pneumonia, pleurisy, etc. But, with our present knowledge, it is impossible to say how much pathological importance belongs to this fact. It does not appear to be uniformly increased in inflammations as fibrin is. It has not, therefore, the same significance as a criterion of inflammation. In short, there are no known special pathological relations of an excess of albumen.

The pathological relations of an abnormal diminution of the quantity of fibrin are more apparent. This constitutes an important condition incident to affections of the kidneys, characterized by the presence of albumen in the urine, or albuminuria. This blood-constituent escaping constantly with the urine, the quantity in the blood is proportionately lessened. Hence, the density of the serum is lowered. Bright reported a case in which the specific gravity of the serum was reduced by a deficiency of albumen as low as 1013.

An important morbid effect frequently follows diminution of the albumen, and, thereby, of the density of the blood. Aqueous or serous transudation is apt to occur into the interstices of the areolar tissue, giving rise to œdema and anasarca, and into the serous cavities. It thus occasions general dropsy. This effect is doubtless in a great measure due to the diminished density of the blood-serum; it becomes unduly aqueous, and filtrates more readily through the tissues. But it is probably in a measure due to an obstruction to the free passage of the blood through the capillary vessels. Experiments have shown that the presence of fibrin and albumen in the blood facilitates its circulation in the capillary system; hence, when the blood is deprived of a considerable portion of its albumen, it accumulates in the capillary vessels, and the increased pressure favors transudation, or dropsy.

Diminution of albumen has been observed in various cachectic affections, in some cases of inflammation, in typhus, notably in scorbutus, in puerperal fever, dysentery, etc. This condition occurs whenever the body is insufficiently nourished, either from too little or poor food, or defective appropriation from any cause; also whenever there is an abnormal expenditure of blood constituents, as in chronic diarrhœa, copious purulent discharge, etc. The loss of albumen does not bear any constant relation to the number of red globules. It is neither increased nor diminished in chlorosis or anæmia. Nor does it appear to sustain any relation to fibrin. Bleeding, which increases fibrin, appears to lessen albumen, but not in a marked degree.

Of morbid alterations of the quality of fibrin we know nothing positive. That important changes in this point of view do occur, is highly probable. But in the present state of knowledge all is conjectural. When the physiologist develops further information respecting the uses of albumen in health, its metamorphoses and its relations to other elements of the blood and to the nutrition of the tissues, the pathologist may hope to understand, better than now, to what extent and in what modes it is involved in disease.

A substance analogous to albumen distinguished by not coagulating under the influence of heat, and imperfectly with the addition of nitric acid, is called *albuminose*. It exists in the blood in the proportion of 4 to 6 parts in 1000. It is found to disappear in the course of diseases in which albumen is diminished. It has no known pathological relations.

Water constitutes a large proportion of the mass of blood, viz. about 790 to 1000 parts. Obviously a certain proportion is essential If abnormally deficient or superabundant, evils are likely to follow, pertaining to the circulation and to changes in the blood itself. These morbid conditions of quantity are incidental to disease. It is doubtful if an excess of water ever occurs, save as an incidental morbid condition. The quantity of blood, as already stated, is probably not subject to much fluctuation. It is, however, by no means probable, as stated by Lehmann and others, that the mass is never increased nor diminished. In phthisis, and the wasting diseases, it is undoubtedly diminished; and it is probable that the amount is sometimes increased. But, as a rule, its normal fluctuations are inconsiderable. If too much liquid be ingested and absorbed, the augmented pressure within the vessels causes exhalation from the pulmonary mucous membrane, the skin, and more especially the uriniferous tubes of the kidneys, and the balance is speedily restored. On the other hand, if loss be sustained, the deficiency is speedily made good by the absorption of water. In the latter mode the blood may become unduly watery, constituting *hydræmia*. If the globules are reduced in number the space is filled with water. If albumen be drained away the serum becomes watery. Hydræmia, therefore, is a substitution of more or less of the other constituents of the blood by water, and not the blood normally constituted, plus a certain amount of water. It is thus incidental to other morbid conditions of the blood. It is doubtful if water ever remains in excess, while the other constituents continue unaffected. Deficiency of water in the blood in a notable degree, is incidental to epidemic cholera. The density of the blood in this disease is greatly increased; it becomes thick, and is with difficulty circulated.

The morbid conditions and relations of several of the most important of the constituents of the blood have now been briefly considered, to wit, the red and colorless globules, or the organized elements, the fibrin and albumen of the liquor sanguinis, carbonic acid gas and oxygen, and water. Numerous constituents yet remain to be noticed. Of these some are organic, and others inorganic, or mineral. Of the remaining organic elements, there are the fatty and extractive matters, sugar, and certain principles embraced under the head of excrementitious substances. In the next lecture I shall consider briefly these remaining constituents as arranged in the groups just named.

Original Communications.

OPERATIONS ON THE AIR-TUBE.

By CHAS. K. BRIDDON, M.D.,
SURGEON NEW YORK DISPENSARY.

In the following series cases will be found illustrating different pathological changes occurring in the air-passage, and the results obtained by operative procedures made for the relief of urgent symptoms occasioned by the same.

It will be remarked that the local lesions in all these cases were associated with, or dependent upon dyscrasies, and that in at least two classes the systemic conditions were allied in character.

In Cases I., II., III., IV., and VI., the changes were deposits of aplastic material on the free surface of the laryngo-tracheal mucous membrane. In three of these cases it was undoubtedly croupous, and although the deposit was the result of changes which had taken place in the blood, the fatal issue was as certainly induced by the mechanical impediment offered to the free admission of air into the lungs.

In Case III. the operation of tracheotomy afforded immediate and marked relief, and, but for the unfortunate accident which occurred in the obstruction of the canula by a plug of inspissated mucus, it is probable that the result would have been more fortunate. It will be noticed that in this case the operation was done early; in the others, in which the opening was made at a late stage of the disease, I do not think that any relief was afforded.

In the remaining cases of this class the exudation was diphtheritic, and the impression made upon the system was profound. Operative interference yielded no results. The medical gentleman in attendance on Case IV. informed me that after the introduction of the canula the respiration was less labored, and that in his judgment the child died of exhaustion.

The gentlemen in charge of Case VI. reported that their patient was not in any way relieved. In this case no benefit was expected to follow the operation, which was done at the urgent solicitation of the patient and his friends.

The impression made upon my mind by the study of these cases, of others of a kindred character which occurred in the practice of my friends, and my readings upon the subject, has been that operative interference is not likely to influence the result in the cases where diphtheria has invaded the air-tube, and that, to be successful in cases of croup, it must be made early, at a period of the disease when I think the conscientious surgeon will hesitate before he acts, knowing that it is in just such cases that recoveries will not infrequently occur under less harsh treatment.

In the other class represented by Cases V. and VII., the formation of an artificial opening was followed by more decisive results, though cachæmia existed in both these cases, in the one in the form of syphilis, in the other in that of leucocythæmia. The immediate danger to life was occasioned by the mechanical obstruction to respiration which existed in the neighborhood of the laryngeal aperture. In Case V. it is probable that submucous exudation took place around the necrosed laryngeal cartilages.

In Case VII. it is equally probable that the obstruction was caused by exudation of a similar character, but occasioned by contiguous cellulitis.

The reports of Cases I., II., IV., and VI. are necessarily brief. No notes were taken of the cases which were under the control of my medical friends; the other cases were reported by myself.

Case I.—This occurred in the practice of my friend Prof. Chas. A. Budd. The patient was a boy, aged six years; he was suffering from the effects of croupous exudation in the larynx and trachea. The obstruction had already brought the patient into a condition of asphyxia, and the operation was done as a *dernier ressort.* A double canula was introduced, and the patient was left in charge of Prof. B. I did not see the patient again, but was afterwards informed by the father that the child was in no way relieved, and died in a few hours after the operation.

II.—This case occurred in dispensary practice. The patient, Michael Lynch, aged four years, was in the last stage of croup. Tracheotomy was performed, a double canula introduced, and he was left in the care of Mr. Stephen Clark (now Dr. S. Clark, U.S.V.). When I returned in two hours I found the child dead. It appears that during a paroxysm of suffocative cough the canula had become displaced, and was found afterwards lodged in the areolar spaces between the trachea and thyroid muscles.

III.—Happened in my own practice. I visited the patient, —— Lynch, aged three years, on the second of January, 1861, and found him suffering with well marked symptoms of inflammatory croup; he had been troubled for several days with cough and pyrexia, and at the time I saw him, there was some, but not urgent dyspnœa, the cough was stridulous, and had the peculiar metallic tone characteristic of croup. I ordered a warm bath, and an emetic to be followed by mist. ammon. et potassæ chlor. 3d.—His symptoms were aggravated, but still not urgent; he was ordered another emetic, and continuance of the mixture. Five P. M.—I found the child still worse, his lips were livid, face bedewed with moisture, and his extremities were losing their natural temperature. I recommended the operation of tracheotomy. Six P. M.—Visited the child in company with my friend, Dr. Aigner, and several of my students. Dr. A. coincided with me as to the propriety of an operation, and it was immediately proceeded with. The trachea was opened, a double canula, both tubes well lubricated with glycerine, was introduced, and I made arrangements with my students to form relays to remain with the patient through the night; full instructions were given them as to action in emergency, and I saw the patient myself at intervals of four hours. The change which took place after the operation was very gratifying; he breathed freely; his face, no longer livid, was suffused with the ruddy glow of reaction; he eat, drank, and played with his attendants, and everything seemed to indicate a successful issue. At eight A. M., next morning, I received an urgent message, and hurrying to the bedside found my little patient dead. Mr. Geo. Badger (now Dr. Geo. Badger, doing service on David's Island), who was attending at the time, noticed a change occur in the child shortly before eight o'clock, he gasped for breath, and instinctively raised his hands towards the tube. Mr. B. immediately removed the inner canula, introduced a swab provided for the purpose, and sent for me. I reached the house within two minutes after the child had ceased to breathe. I instantly removed the outer canula, when the cause of obstruction was revealed; the extremity of the canula was blocked by an annular mass of inspissated mucus which had been detached, and in an expiration had been forced into the end of the canula, in all probability. When Mr. Badger introduced the swab he forced it from the point where it was impacted, but, of course, it would follow the removal of the swab, and regain the same position in the lesser end of the tube. After removing the outer canula I emptied the trachea of the frothy spume which it contained, by suction with the lips applied to the wound, and then I alternated insufflation with the postural treatment; this I kept up for half an hour, when finding that both life and all hope of resuscitation had fled, I desisted.

IV.—April 19th, 1862, I was requested by Dr. Bernard Kelly, of Broome st., to open the trachea of a patient of his that was suffering from an attack of diphtheria. I found the child, aged two years and a half, almost asphyxiated, the fauces were covered with exudation, and it was evident that the larynx was also involved, though we were not able to determine how far down the tube the disease had extended. I at once proceeded to the operation, but before I had reached the trachea the child had ceased to breathe. I completed the operation as rapidly as possible, introduced a canula, and inflated the lungs with my lips applied to the opening. After a few inflations the child gasped, and respiration was restored. I advised the frequent removal of the inner canula, the occasional introduction of a few drops of glycerine, and consigned the case to the care of Dr. K. I was subsequently informed by the Doctor that the urgent symptoms of dyspnœa were entirely relieved by the operation; the child survived thirty hours, and appeared to sink from exhaustion.

V.—The history of this case will be found recorded in the proceedings of the Pathological Society, June 25th, 1862. The patient, a Frenchman, aged forty-two, had syphilitic antecedents, and at the time of the operation was dying in a condition of apnœa, caused by œdema of the glottis. The relief afforded by an artificial opening was marked, but the changes occasioned by the destructive ravages of the disease were such as did not permit the removal of the canula. The patient resumed his occupation, and continued to follow it for some months, when he began to suffer from the formation of wads of inspissated mucopus, mingled with the debris of tissue. These exudations were thrown out around large masses of necrosed ossified laryngeal cartilages, which, gravitating, lodged, and formed cylindrical moulds of the larger bronchi and trachea. A subsequent operation was performed on this patient, the cavity of the larynx was exposed, and the necrosed alæ were removed; the patient only survived this second operation a few days, and at the autopsy, amongst other pathological changes, the cricoid cartilage was found in a condition of necrosis.

VI.—January 15th, 1863, I was requested to meet Prof. Chas. A. Budd and Dr. Holcomb in consultation on a case of diphtheria, and was desired to come prepared to perform the operation of tracheotomy. The patient, a native of Massachusetts, aged thirty-nine years, had been attacked with the disease two days before. I found him suffering severely from urgent dyspnœa; his face was livid, surface bedewed with moisture, eyes prominent, and all his respiratory muscles were vigorously engaged in the terrible but useless efforts to expand the chest. I observed that the muscles of the neck were most active, those associated with the thoracic walls less so; in fact, the chest itself appeared to be almost motionless, and it was everywhere resonant. In the fauces were several patches of exudation, and I was shown some casts which had been expectorated in the morning, and they were the most perfect of their kind that I had ever seen; arising from a stem half an inch in diameter, they divided and subdivided dichotomously down to casts of the minuter ramifications of the tube.

The opinion was expressed that in all probability he would not be relieved by an artificial opening which would most likely be situated above the obstruction, but the patient himself and his friends desired that it should be done. For a little while after the canula was introduced it was observed that his breathing was less labored, and his countenance became less livid, but relief was of short duration; he gradually sank and died a few hours after the operation.

VII.—*Phlegmonoid Inflammation of Neck; Laryngo-Tracheotomy.*—On the fourth day of May, 1863, I was requested to visit Charles Thomas, aged 19 years, a native of this country, and printer by occupation.

Previous History.—Patient came out of Bellevue Hospital on April 28th; he had been an inmate of that institution sixty-nine days, and says that he was treated there for leucocythæmia splenica. The day he received his discharge from the hospital he was out late, and in less than twenty-four hours afterwards began to experience pain in the right side of his neck; it was accompanied by tumefaction, and both pain and swelling went on increasing up to the present date; he has not been able to sleep for several nights, and for the past two days he has not been able to separate his teeth, and has found swallowing even fluids extremely difficult.

Present Condition.—General aspect of the boy is bad; he looks as if he were the subject of some dyscrasy, though the anæmic appearance of his face is masked by the suffusion of febrile excitement; the temperature of his skin is exalted, and his pulse is accelerated.

The normal contour of the right side of the neck is obliterated by a diffuse, elastic swelling, which occupies the whole of that region, mounting over the inf. max., and passing across the mesial line in front; it does not feel like the hard, brawny swelling which is met with in the ordinary forms of sub-fascial abscess; there is an element of elasticity about it which I have not observed in the other variety, and which appears to be limited to the tissues superficial to the deep fascia. The impression conveyed to the finger is, that all the parts beneath the fascia are infiltrated with the solid products of inflammation, and at no part of the swelling could I detect fluctuation. The color of the integuments was unchanged; it was tense, white, and glistening.

I was only able to separate his jaws about a quarter of an inch, and in the glimpse that I was able to obtain of the fauces, fancied, but am not certain, that I discovered some swelling which approximated the tonsils, but there was none of the arterial injection met with in amygdalitis. 6th, P.M.—I received a pressing summons to visit the patient, who, I was informed, was suffocating. When I arrived at his house I learned that in the early part of the afternoon his breathing had become very difficult, and that he was no longer able to articulate. I found him suffering from urgent dyspnœa; the fixed condition of his jaws prevented my ascertaining the condition of his glottis, and although I could detect no fluctuation in any portion of the external swelling, I determined to make an effort to relieve him by an explorative incision into its most prominent part. The parts were incised to the extent of an inch and a half over the centre of the sterno-cleido-mastoid, the fascia was divided on a director, and a finger was introduced beneath it, in front of, and behind the posterior border of the muscle, but in no direction was I able to detect the presence of any collection of fluid; the tension of the parts separated the sides of the incision, and it was not necessary to introduce anything for that purpose.

I now directed my attention again to the fauces; by introducing a stout tablespoon I was able to separate the jaws about a quarter of an inch, and by the aid of a bad artificial light, and a clumsy assistant, I was just able to get a sight of the parts. I was in the act of depressing the dorsum of the tongue with the haudle of the spoon when I saw a little stream of pus well up in the back of the throat, and in the same instant the boy jumped from the lounge and fell backwards in the agony of death from suffocation. It was evident that the pressure of the spoon handle had ruptured the walls of an abscess, and that it had either opened into his trachea or gained entrance through the natural aperture in quantity sufficient to deluge the air tube. His efforts to inspire were fearful, but they were fruitless, and whilst I was taking out my instruments and explaining in a few brief words the necessity of an immediate operation, he raised himself up, pointing towards his throat, and fell back apparently dead—lips apart and livid, features fixed and motionless. There was not a shadow of a doubt but that all respiration had ceased. Without more delay than was necessary to open the blade of a knife I made a free incision through the infiltrated tissues in front of the windpipe, which was situated at least an inch and a half from the surface; the condition of the parts resembled that occurring in the brawny perineal swelling met with after urinary infiltration, and in the deeper portion immediately overlying the tube there was a stratum of extravasated blood. I cut right into the thyroid cartilage, and immediately heard air in small quantity pass either into or out of the chest. I could not introduce my finger into the tube, however, until I had carried the incision downwards so as to divide the crico-thyroid membrane and cricoid cartilage; when this was done the fixed muscles became suddenly and spasmodically contracted, and a pretty free inspiration was made. To my great relief I could now hear air freely entering the tube which was introduced upon removal of the finger, and the boy's features, which a moment before were fixed in the vacant stare of death, were once more lighted up with animation. The canula introduced was a double one, of large size, with a movable neck-plate; the management of it was left in charge of a trusty woman, who was directed to remove the inner one at intervals of two hours; he was also ordered to be freely supplied with diffusible stimuli and fluid nourishment. 7th.—His breathing has been free during the whole of the night, and he expresses himself as much relieved; the swelling of the neck does not appear to have at all diminished, and he still experiences the same trouble in swallowing. The inner canula has been removed, cleansed, and replaced every two hours, and before introduction each time it has been lubricated with glycerine; cataplasms of sem. lini pulv. are applied to the neck, and he is fed upon the mist. vini gallici. 8th.—General condition much improved; slept considerable through the night, and feels much refreshed this morning; he still swallows with difficulty, and, when he attempts to do so, a portion of the fluid passes through the wound in the larynx; the surface of the incision made in the side of the neck is covered by adherent exudation, but it does not as yet discharge pus; cataplasms are assiduously applied, in the hope that they may invite such discharge to this point. 9th.—Still continues to improve, takes his noggs well, and says he thinks the obstruction in his throat has diminished; neck appears less swollen, but there has been no discharge from the lateral incision. 10th.—Attention was directed to the left side of the neck. He says it is very painful, and there is some swelling over the sternal origin of the stern. cleid. and mastoid; the part is also tender, but irrespective of this he is doing well. 11th.—Swelling observed yesterday was increased, and as I detected fluctuation an incision was made which evacuated about two ounces of well elaborated pus. I removed the external canula, and found that no union had taken place in any portion of the incision made to reach the air-tube. After I had removed it I occluded the opening in the soft parts with my thumb, but as I found the voice almost inarticulate, and respiration somewhat labored, I lodged it again *in situ*, and determined to let it remain there a few days longer. 12th.—Can separate his jaws to the extent of an inch; fauces not congested or abnormal in appearance; he will not permit me to make a digital examination of his glottis. 15th.—Swelling of the right side of the neck has increased, and deep-seated fluctuation can be detected. I succeeded in establishing a communication between the site of the original wound over the mastoid and the cavity of an abscess situated beneath the deep fascia. The boy's general condition is improving in spite of this additional tax upon his system; he takes fluid nourishment in good quantity, with stimulants and supr. fer. hypophosphit. 17th.—After exploring with a probe, I found that the opening over the centre of the mastoid was not sufficiently dependent, and made another in a more favorable position. 19th.—All the swelling has disappeared, the openings are discharging freely, and he looks altogether a different being; removed outer canula for a few minutes, and found his voice and breathing decidedly improved. 21st.—Removed both canulas, and, finding respiration unimpeded, did not replace them, but left instructions to be sent for immediately if any embarrassment occurred. 22d.—Removal of tube has caused no inconvenience; he looks very much improved, and says he can swallow much better now than when the tube was in.

After this date the boy steadily improved under the use of good diet, in combination with the administration or ferruginous and other tonics. Obliteration of the openings made in the neck was tardy; it was more than six weeks before the one in the trachea was closed; and at a later period those situated on the lateral aspect of the neck, which had degenerated into fistulous tracts, were still occasionally discharging.

DEATH RESULTING FROM
THE USE OF CHLOROFORM DURING LABOR.

By O. D. POMEROY, M.D.,
OF NEW YORK.

I was called to attend Mrs. C., aged 40, in labor with her tenth child; nine children living. The pains becoming very severe I administered chloroform, avoiding a full anæsthetic effect, in the mean time labor terminating favorably. There was no cough or any unusual symptoms until the patient began to return to consciousness, a period of about half an hour from the commencement of the inhalation. She then had signs of irritation of the air passages, as evinced by a few moist rales. An opiate was administered, with the hope that this state of things would disappear; this being about 11 P.M. At ten next morning I was summoned in haste to her bedside, and found her breathing with great difficulty; mucous râles were heard throughout the lungs; pulse feeble, with other signs of sinking. Brandy was freely administered, and, after rallying a little, an emetic was given, with the view of relieving the accumulation in the bronchial tubes. It produced no effect, however, beyond a slight emesis. She died in ten or fifteen minutes after. The chloroform was obtained of a reliable druggist, and was manufactured by one of our most respectable chemists.

Upon inquiry of the manufacturers I found that a short time previous (1861) their chloroform was made by a different process, as it was found to be of greater purity. This, however, showed a tendency to decompose upon exposure to the air, giving off free chlorine. At once all in the market which could be found was recalled.

There was no post-mortem, as the friends would not have permitted it had I requested it. All the vital organs, however, seemed normal, and I was unable to assign any other cause of death but the inhalation of the chloroform.

GUNSHOT WOUND OF BRAIN.

By T. H. STILWELL, M.D.,
SURGEON IN CHARGE OF GRACE CHURCH HOSPITAL, ALEXANDRIA.

Colonel Thomas Ruffin, 15th North Carolina cavalry, aged thirty-seven years, was wounded at the battle of Bristoe Station, by a musket-ball coming from before backwards, striking the skull near the apex, and ploughing along the sagittal suture, a distance of four inches. The skull was bared about two inches, and both tables fractured, making an opening about one-eighth of an inch in diameter. Patient perfectly conscious, no paralysis of any muscles of the body. No pain was complained of, appetite good, pupils natural and regular. Had full power over sphincters, was perfectly conscious, bowels constipated, pulse good. Urine passed freely and voluntarily the day following his admission. Delirious during the day a few moments at a time; would attempt to raise himself from his bed, and tear dressings from head. Free evacuations of bowels, fæces and urine passed voluntarily. Patient continued in this state until two minutes before death, when he commenced breathing stertorously, and died.

Post-Mortem Examination.—The whole of the vessels of the scalp much congested. There were two apertures near the apex of the skull, one about one-eighth, and the other one-quarter of an inch square, extending through both tables. Upon removing skull-cap it was found that its inner table had been shattered around the apex, about one inch and a quarter in diameter, and the pieces deep into the brain matter. Two pieces, three-quarters of an inch in diameter, embedded in the dura mater, and about two ounces of blood found in the base of the skull with cerebellum. Upon removing the dura mater found two clots of blood, about two and a half fluid drachms each, lying on the left lobe of the brain, and about three ounces of purulent mucous fluid. The brain matter of the left lobe was cut up, making an opening two inches in diameter, extending from the external opening of the wound to the left lateral ventricle, and several pieces of bone varying from one-quarter to one-eighth of an inch in diameter, found along this opening, and into the left ventricle. In the right lobe directly under the wound and on a level with the corpus callosum was found a piece of the bullet, flat, and one half of an inch in diameter, deeply imbedded, and the course from the external opening of the wound in the skull to the left ventricle was discolored.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, June 24, 1863.

DR. L. A. VOSS IN THE CHAIR.

CHRONIC PNEUMONIA IN A CHILD, ENDING IN ABSCESS OF THE LUNG.

Dr. Krackowizer also presented the portion of a lung removed from a child twelve months old. When about seven months old, last February, the patient suffered from an attack of measles, and two months subsequently, when first seen by Dr. Krackowizer, was found suffering from pneumonia of the right lung. This condition of inflammation continued until the end of the April following, the child during all the time growing thinner and being subject to profuse perspirations. On April 18th the child vomited up a large amount of purulent matter, which was followed by a contraction of the lower portion of the right chest. There was then increased resonance on percussion all over the contracted portion, metallic tinkling, and other evidences of a large cavity. The opinion given was that a cavity in the lung had discharged itself, but on account of the contraction of the chest it was concluded that no pneumothorax existed. Dr. Jacobi, who saw the child at that time, confirmed that view. The patient lingered on until June 22d, when it died of exhaustion. There was no examination of the chest made during the last month of life, as the patient was in too feeble a condition to allow of it.

On post-mortem examination the left lung was found adherent to all parts of the pleural cavity, except at one circumscribed spot, where a collection of pus was found which communicated with the cavity in the lung tissue. Both lungs were studded throughout their whole extent with hard tubercles, as was also the case with the bronchial glands. The case was remarkable as one of pneumonia lasting such a length of time, and also interesting in respect to the question of diagnosis, it being evident that at first the abscess discharged itself through one of the bronchial tubes, and that it afterwards perforated the lung into the pleural cavity, giving rise to circumscribed empyema.

Dr. Noyes presented the eyeball of a soldier, aged 20 years, who first came under his observation five days previously. The patient had been in a military hospital for some time for treatment of necrosis of the bones of the foot, and at a certain period, which he could not designate, his eyesight became destroyed. About three weeks before presenting himself to the Eye Infirmary he stated that a white spot made its appearance on the outer surface of the right eyeball, and soon afterwards something broke inside the eye. When Dr. Noyes first saw him the lower half of the eye was inflamed; there was, however, no ecchymosis of the conjunctiva. The iris was inflamed and pushed towards the cornea. When the eyeball was directed strongly upwards a tumor was discovered on its lower portion. The conjunctiva and sclerotica had been destroyed over its most prominent portion. At that time he had not the slightest perception of light. The ophthalmoscope threw no light on the case. In the course of the next few days the symptoms became more aggravated, the size of the tumor increased, and it was decided to make an incision into its substance. This procedure was followed by no good result. Thereupon it was decided to remove the eye at once, which was done. On dissection of the eye after removal it was found that the retina had been completely separated from the choroid, and that the vitreous humor had been absorbed. The tumor was found to be connected with the choroid and sclerotic coats; and it was also evident that by inflammatory agglutination it had found its way through to the external surface of the eyeball. Upon the retina there were seen numerous white elevations, the size of a rape seed. Too hasty a microscopical examination of the tumor was made to decide upon its composition, though the appearances presented were very suspicious of cancer.

Dr. Sands thought that it was probably cancerous, from the fact that the tumor had invaded the sclerotic coat and passed through it.

INVAGINATION.

Dr. Jacobi presented two specimens of invagination of the intestine. The first had the following history: It was taken from a female child, four months and a half old, who, up to five days before death, had enjoyed good health. She was then seized with diarrhœa, attended with a slight discharge of blood and some tenesmus. Subsequently vomiting came on after the taking of food. The child remained in about this condition for the succeeding four days. During that time she became somewhat emaciated, and the pulse became feeble. At first the treatment consisted of purgatives, but when the attending physician diagnosticated the true nature of the case, it was changed. Dr. Jacobi saw her about this time, and made use of every means to reduce the invagination, such as holding the child by the feet, resorting to injections of warm water, and of gas, but with no avail. A tumor was at that time detected in the left inguinal region. The child died in a convulsion.

The autopsy was made sixteen hours after death. There were a few ounces of serum found in the peritoneal cavity. The invagination commenced about six inches above the anus, and measured about four or five inches in length. As was usual in cases of intussusception in early infancy, the invaginated portion commenced in the small intestine, the ileo-cœcal valve being implicated, and the whole forming a hard tumor. The upper end of the mass showed slight evidences of injection. There was present also some slight general peritonitis.

The second specimen of intussusception was taken from a child five years of age, who, during her whole lifetime, was intensely cyanotic. On the third day before her death she became soporose, and was never roused from that condition. About forty-eight hours after this symptom made its appearance she was seized with a diarrhœa, the passages consisting of serum and mucus, mixed with a very small amount of blood; at the same time she showed symptoms of tenesmus. The child had, during the last twenty hours previous to death, from ten to fifteen passages of the nature described. She vomited a few times during her illness, and died from sheer exhaustion. On post-mortem examination the invaginated portion was found to consist of the lower portion of the small intestine, the ileo-cœcal valve, the ascending, and a portion of the transverse colon. The period during which this invagination continued was about twenty hours, and in consequence of its short duration there were no symptoms of peritoneal inflammation present.

The question arose as to the possibility of this invagination being produced during the agony, but inasmuch as all the symptoms of the accident were present during life, Dr. Jacobi concluded that it was due to other causes.

The cause of the cyanosis was due to the pulmonary artery, absence of one-fifth of the septum of the ventricle.

CONGENITAL CANCEROUS CYSTIC HYGROMA.

Dr. Jacobi presented a third specimen, a cancerous tumor, removed from the sacral region of an infant about sixteen months old. Dr. Jacobi saw the child when but four months old. There was then a tumor on the right gluteal region, extending over the median line a little to the left, evidently (at least in part) consisting of a cystic growth. The child was not seen by him afterwards until the post-mortem examination. The tumor had then very much increased in size. Part of the mass had undergone degeneration and suppuration; the remaining portion was made up of a number of cysts, which were filled with fluids of various consistencies, and separated from each other by pretty solid tissue. The tumor had its origin on the anterior portion of the os coccyx, and thus the lower portion of the sacrum, and this bone, were pushed upwards, and the anus was pushed forwards to that extent that the perineum was made very short. The microscopic examination of the tissue of the tumor showed it to be cancerous. Dr. Jacobi thought that it was a case of congenital cancerous cystic hygroma, of which he had been able to find but one other case in medical literature.

MORBUS COXARIUS—NECROSIS OF HEAD OF FEMUR.

A fourth specimen was the head and neck of a femur, removed post-mortem from the body of a girl aged seven years. The patient about a year ago fell down a flight of stairs, and some time afterwards was brought to Dr. Jacobi's clinique in the first stages of hip disease. She was treated by extension, and seemed to improve for a time. A few months elapsed, and she was again brought in in the second stage of the disease. The treatment was continued, and she again seemed to recover, but was a third time brought back, when a tumor was discovered a little within the median line of the femur and about an inch below the greater trochanter. An incision was made into this swelling, and a large amount of matter evacuated. No communication could be detected into the joint. On the fourth day after the operation the child died of scarlet fever.

On post-mortem examination the head of the femur was found necrosed in several places. The cartilage of incrustation was destroyed, and the acetabulum was found carious, with the exception of its anterior and lower portion.

Dr. Post stated that it was remarkable that the head of the femur should be necrosed and not carious.

Dr. Conant remarked that Dr. Sayre had presented a case of morbus coxarius where the same condition of things existed.

* * *

M. **Trousseau** has astonished the French medical men by demanding permission to retire from his clinical chair. "This professor, still so fresh in mind and body, so zealous, and devoted to the instruction of students, whose lectures are so largely attended, is, we are told, fatigued, and requires rest. His pupils, however, see things differently. A petition has been got up by them, and already covered with signatures, calling upon the minister not to accept his resignation."—*Brit. Jour.*

American Medical Times.

SATURDAY, NOVEMBER 14, 1863.

HUMANITIES AND INHUMANITIES OF WAR.

A **London** Medical Contemporary, which frequently quotes dubious newspaper paragraphs reflecting upon our Government, or the people of the North, protests, in the name of humanity, "against a kind of warfare which no Government, claiming to be recognised amongst Christian nations, has a right to practise." The first of the "series of outrages" which has so moved the sympathies of this British philanthropist is an "order issued (at Norfolk, Va.) that no physician shall practise his profession who will not take an oath of allegiance." Though we are not acquainted with the facts upon which this order was based, we do not doubt its justice. Military necessity doubtless led to an order requiring all persons pursuing business to be loyal men, and we see no reason why medical men, as a class, should be exempt, and especially the physicians of that city. We have never heard a rumor even of unfairness in the military administration of **Gen. Vielé**, and were the facts known we do not believe that even an Englishman would cavil at this order.

The second outrage is stated as follows:—"The State of Virginia has an insane asylum at Williamsburgh. When that town fell into the hands of the Federals there were three hundred lunatics in the asylum. The physicians, keepers, and nurses were driven away, and the friends of the inmates forbidden to see or minister to them. The institution was placed under military rule, and the management assigned to army surgeons, with common soldiers for nurses; and word was sent that if any attack were made the 'poor lunatics' would be turned out and sent to Richmond, where was neither room nor accommodation for them." We happen to know something about this lunatic asylum and its management both by the rebels and the federals. The asylum was taken possession of during the peninsular campaign, a surgeon placed in charge, the nurses retained, and a full supply of hospital and other stores furnished. The building was also improved in its internal arrangements, and the institution was placed in a better position than previously. During the following season the rebels made a raid upon the town of Williamsburgh, sacked the asylum, stripping it of every movable article, taking with them also all the old nurses. The "poor lunatics" were left in a perfectly destitute condition. Word was then sent that if this act were repeated the inmates would also be sent to Richmond. The asylum was reprovided and has remained unmolested from that time, and we have the testimony of **Dr. Nichols** of the National Insane Asylum, and **Dr Gray** of the New York State Asylum, who have, at different times, been directed by the President to inspect the institution, that it is well provided and well managed. This charge of inhumanity against our Government, couched in high-sounding phrases, and seasoned with complacent reflections upon the humane character of the English wars, has not the least foundation in fact. War is essentially the very perfection of barbarism. It aims at the destruction of human life by such means as almost necessarily cause the largest amount of human misery. Its weapons are designed to destroy life, or, failing in this, to maim, and bruise, and cripple an antagonist. And if an enemy cannot be destroyed outright, he may be stabbed, or burnt, or drowned. War respects neither life nor property. In every aspect in which we may view it war is cruelly and relentlessly destructive of everything held sacred among men. All history teaches us the truth of these statements. Large armies will commit acts of vandalism, however strict be their discipline. Governments must also enforce decrees that on their face are repugnant to the popular sentiment in times of peace. England stands forth as the highest type of civilization, and yet no nation ever exhibited more of the ferocity of war. The American revolution was marked by acts of inhumanity which still make the young tremble when they listen to their repetition. In Boston, in New York, and in every city where they enforced military rule, they disregarded the amenities of civilized life. The medical profession, like other kinds of business, was placed under the most rigid surveillance, and no one could practise but the loyal. We need not allude to the sufferings in the prison ships, to the horrible atrocities practised by savages upon defenceless women and children under direction and pay of the English, to the cruelties of the East Indian wars, or to the extermination of entire towns in Ireland by English armies. These facts are among the records of history. They teach the lesson that war, however civilized the people engaged, is destructive of the material interests of man.

And yet war may have a coloring of humanity. Justice and mercy may go hand in hand upon the same bloody battle-field. An erring son may raise his parricidal arm against him to whom he owes implicit obedience, and the same parental hand that inflicts the corrective chastisement may bind up the wounds which itself had made. So, near the scene of carnage where hosts contend against hosts, animated by the most fiendish and cruel passions, we may find the gentlest ministrations of mercy. Friend and foe alike receive succor. The same hands administer to the relief of every one who requires aid.

The war on the part of our Government is the first in the history of civilization where every possible effort was put forth to mitigate its horrors. While our armies are pushed forward to the speedy accomplishment of their great work, they are supported and encouraged at every step by the medical department bearing all that is necessary to their comfort and health. In the terrible struggle on the battle-field the wounded receive early and tender care. Nor is this solicitude confined to the soldier of the Government; the wounded rebel is equally well provided for. In the hospital the loyal and disloyal are placed side by side, and share the same attentions. The Sanitary and Christian Commissions are great auxiliary bodies in the care of the sick, and are the direct medium through which the people communicate with the army. Neither of these associations distinguishes between the Northern and Southern soldier.

But we need not dwell on these facts, so often presented in these pages. War in its mildest state is the greatest scourge that can be inflicted upon any people. But we believe it is conducted in this country as humanely as it is possible under any circumstances. Life is sacrificed on an enormous scale, but not more than in other wars of equal magnitude. Acts of individual barbarism are committed, but they are the exception, and have no sanction from Government. History will not fail, we are persuaded, to give to our Government due praise for its persistent efforts to mitigate the rigors of war.

THE WEEK.

The success of the Sanitary Commission in the Western Department has been most encouraging. Large and most timely supplies have been sent to the different armies, and on the great battle-fields the Commission has been foremost in supplying aid. Much of the efficiency of the Commission in this department is due to the energy and executive ability of Dr. Newberry. He has so organized and distributed labor as to have active co-operation at any desirable point. The people do not seem to tire in their efforts to sustain this noble charity.

In his address before the Social Science Association, Dr. Christison contended that there was not sufficient evidence to prove that deficient drainage produced fevers. Foul air may predispose to fever, but the exciting cause must be sought elsewhere. The following, in regard to the prevalence of tubercular disease, is important:—

> "Philanthropists and legislators, in dealing with the unhealthiness of towns, have, until lately, had chiefly to do with epidemic diseases as their main source of excessive mortality. But it is apparent that tubercular diseases are a still more serious source of destruction to the well-being of a great city. It is also most probable that the abatement of their ravages will need a different description of measures from those which have been proved to be serviceable against diseases of the epidemic class. The discovery of the necessary measures is a duty which it peculiarly becomes this association to press upon the Government of the country, and also upon the great, the wealthy, and especially those whose business of life it is to amass wealth through the labor of the working classes, and whose requirements have occasioned the concentration of the people in overgrown towns, with all its concomitant evils."

Reviews.

Transactions of the Medical Society of the State of New York, for the Year 1863. Albany: 1863.

(Concluded from page 221.)

Article VII.—*A New Operation for Artificial Hip-Joint in Bony Anchylosis. Illustrated by Two Cases.* By Lewis A. Sayre, M.D., Professor Orthopœdic Surgery, Bellevue Hospital Medical College, and Surgeon to Bellevue Hospital.—The first case is thus stated: Anchylosis of both hip-joints—tenotomy and brisement force in one, and in the other exsection of semicircular segment of bone above trochanter minor—recovery with artificial joint.—The patient was a native of Lexington, Ky., age 26, and presented the following condition. The left thigh was immovably fixed at nearly a right angle with the pelvis, by long cementation or true anchylosis. The right was very firmly attached to an angle not quite so acute, and by a very careful examination I thought some slight motion could be detected which indicated that the attachments were fibrous in character, or at most were asterphytes only, and external to the joint, and that there was no agglutination between the femoral head and the acetabulum, whereas the opposite side seemed perfectly cemented together. He could not walk, except by whirling himself in semicircles, first on one leg as a pivot, and then the other—or else by swinging himself on his crutches from the axilla. In order to get both feet upon the ground at the same time, his back was curved inward very much at the sacro-lumbar junction, the left knee flexed at an angle of about 45 degrees with the thigh, and the right side of the pelvis was some inches higher than the left. He could only sit by assuming a most awkward posture, half reclining on his side upon a couch or sofa; and in lying down was curled up either on one side or the other, or if upon his back he had to be supported by pillows under his knees, and under the lumbar vertebræ. In fact, he was the most pitiable object I ever saw, and one that would excite the sympathy of any surgeon.

The following operation was performed on the right thigh: division subcutaneously of the adductor muscles, the rectus, tensor vaginæ femoris, and femoral fascia of the right hip, and breaking up the adhesions by some considerable force, obtaining a very good motion to the joint. Extension was made to the limb by a weight and pulley, and the hip enveloped in cloths wet in cold water; no serious trouble followed the operation, and in six weeks he could flex and extend, ab- and adduct his right limb with considerable freedom. On the left a semicircular segment of bone above the trochanter minor was removed for the purpose of establishing a new joint. Drs. L. P. Batchelder, Woodhull, and Osborne of this city, Drs. Hooker of New Haven, Ct., Hichborne, of Mass., and Dr. James S. Green, of Elizabeth, N. J., were present at the operation.

The design of this operation was to go above the trochanter minor, so as to retain the insertion of the psoas magnus and illiacus-internus muscles attached to the lower fragment, for the purpose of flexion, and by cutting out a ***semicircular*** piece with its concavity downward, and then rounding off the upper end of the lower section, to nearly imitate the natural joint.

Dr. Sayre states that, so far as he is informed, this is the first section of the femur at this point; but he has overlooked the operation of Dr. Kearney Rogers. Dr. Sayre's case was entirely successful. Four months after the operation the patient could go up and down the steps without any difficulty; could stand on either leg without either crutch or cane; could take a step with either foot twenty-seven inches, and when he supported his body on his crutches, could straddle his legs thirty-six inches apart. He could cross either leg over the other below the knee without assistance, but could not cross them upon the thigh.

The second case was one of anchylosis of left hip, section of elliptical segment of femur above trochanter minor—recovery, with false joint and good motion.—The patient was a lady, aged 24, who had suffered from hip-joint disease six years before, the disease terminating in anchylosis. The following was her condition at the time of the operation: "In the erect posture, the heel of the left foot was ten and a half inches from the floor, and on the right side of the right leg. In attempting to walk, it was brought to the floor, still on the right side of the opposite limb, or cross-legged; and was made to reach the floor by a remarkable curvature forward of the lumbar portion of the spinal column; but walking was attended with great fatigue, and a peculiar dull pain in the lumbar region. Urination produced constant excoriation of the limbs, requiring great care and trouble in drawing a handkerchief or soft rag between the closely compressed thighs, to keep them clean or comfortable. Several efforts were made to insert a catheter, in order that the urine might be led off without irritating her limbs; but it was impossible to insert the finger so as to reach the orifice of the urethra, either from the anterior or posterior position, although every effort was made, and with great perseverance." The same operation was performed as in the former case, and with similar results. This patient died of an intercurrent disease before the cure was entirely complete. An autopsy revealed a false joint at the seat of the operation, having many of the elements of a natural joint.

Article VIII.—Section 1. *Correspondence and Report to Wm. A. Hammond, Surgeon-General U.S.A., including Experiences in the Peninsular Campaign.* Section 2. *General Report to E. D. Morgan, Governor of the State of New York.* Section 3. *Resection of Joints and Conservative Surgery.* By John Swinburne, M.D.—The two first sections of Dr. Swinburne's paper are already familiar to the readers of the Medical Times, and we shall pass them over. The section on resections of joints and conservative surgery is an able defence of exsections as opposed to amputation, and a judicious discrimination of the rules that should be observed in the selection of cases and in performing the operation. We most heartily concur in the opinions put forward, and can only hope that they will be widely circulated in the army, where they must be productive of good results. The simple truth seems to be, that in wounds of the upper extremities amputation should rarely be performed. Nothing but life can compensate the loss of the arm. Without the overpowering weight of statistics which Dr. Swinburne brings to his aid we should be prepared to accept his arguments as conclusive.

Article IX.—*Fractures of the Cranium*, by Frederick Hyde, M.D., of Cortlandville, N.Y.—Dr. Hyde reports seventeen cases of fracture of the cranium with the following results:—Whole number of cases seventeen, of which ten recovered, one with impaired intellect. The remainder were fatal. In seven of the cases, from moderate to extensive lesion of membranes and cerebral texture existed. In three cases in which the compression was well marked with depressed bone, in which elevation was not practised, complete recovery followed. In four cases in which it became necessary to elevate depressed bone without trephining or oblating solid bone, two recovered and two were fatal. In one instance of loss of a large bony fragment, without compression, complete recovery followed. Five cases in which trephining was practised, three recovered, two died. Three cases called fracture at the base of the cranium, were fatal. One case of fracture at the base of the cranium, recovered. In two cases with lesion of membranes and cerebral substance with trephining, both died. Two cases in which lesion of the dura mater and brain tissue were present, without trephining, were fatal. Two cases penetrating wound of the membranes and brain, without trephining, both recovered. One case of wound of membranes and brain, with trephining, recovered. The patients were all males between six and forty-five years old.

After narrating the cases the author discusses the vexed question of the use of the trephine, and comes to the following conclusions:—

"While the utmost precautions are to guide us in resorting to the trephine, from the results following its use in civil, private practice, we cannot so fully adopt the doctrine inculcated by some distinguished military surgeons, which would assign so large a proportion of these injuries to the expectant treatment.

"The proportion of cases in which the trephine is needed, will be small under any circumstances; for very many, which seem at the outset to show conditions needing its use, by cautious, patient manipulative trial, will be successfully met, the depressed portions sufficiently elevated, as illustrated in our group of cases.

"So, then, bearing in mind that we should exercise all possible discrimination in resorting to this operation, we, on the other hand, cannot but insist that a cautious trial for the removal of all loose spicular fragments, and blood, should it require even forceps, elevator, and trephine, would be infinitely preferable to leaving a part or all of them, which are to act as foreign agents of direct irritation upon textures of great delicacy, already under a more or less dangerous amount of lesion."

Article X.—*Case of Lithotomy*, by A. Baker, M.D., of Norwich, Chenango county.—This case was one of stricture of the prostatic portion of the urethra; operation—weight of calculus four and a half ounces—termination favorable.

Article XI.—*Resection of Ankle Joint*, by John C. Johnson, M.D., of Kings County.—This is a case of resection of the ankle.

"In this age of conservative surgery, when resections are so much in favor, when operations upon the largest articulations can be found in numbers in almost every periodical, those upon the ankle-joint seem strangely few. The hip, knee, and elbow are the favorite articulations for resection, while at the ankle, even when the disease is confined to the joint itself, or its immediate neighborhood, Syme's or Pirogoff's operations are resorted to, and the healthy foot sacrificed.

"So rare has been this operation at the ankle that Mr. Henry Hancock, senior surgeon to the Charing Cross Hospital, in an article in Braithwaite's Retrospect for January, 1860, states, 'the operation was first performed by Moran, and subsequently by Jäger and others abroad; but I believe that I am justified in stating that with the exception of those which I have done myself, there is not a single instance upon record in which excision of the ankle-joint has been performed in this country for disease.'

"In the English journals, I have not found other cases than those reported by Mr. Hancock, and in our own medical literature there is the same absence of cases. Why the solitary exception should be made of the ankle-joint, and the healthy foot sacrificed, I am at a loss to understand.

"In both Syme's and Pirogoff's operations, in addition to the loss of the foot, there is the danger of sloughing of the flaps, or of bagging of the pus, which danger does not exist in resection of the joint.

"In my own practice, an opportunity offered for an operation of this kind, though in a patient constitutionally unfavorable, and the result has been so satisfactory to the patient and surgeon, that it may not be devoid of interest to the profession. On the 26th of January, 1862, I was called to see Mr. J. C., a merchant about 45 years of age, who had received a severe injury by falling on the joint following a compound dislocation, fracture of the internal malleolus, and extensive necrosis of the tibia with profuse suppuration. The operative procedure was adapted to the condition of the parts. The result was satisfactory. The patient's improvement in general health was marked; the drain of laudable pus from the system did not produce the constitutional disturbance that the previous unhealthy discharge had. The patient progressed most favorably, with no features of unusual character. Slight portions of bone exfoliated at the points where the old abscesses had formed. About the 1st of June, the union was sufficiently firm to allow the patient to move on crutches. He can now walk with only a slight halt, and the limb is far more serviceable than any artificial one could be." The paper is illustrated with a lithograph.

Article XII.—*Hyperostosis of Lower Extremities.* By T. C. Finnell, M.D., Surgeon to St. Vincent's Hospital, New York.—This person was 27 years old at the time of his death:—"The weight of the right lower extremity is six pounds, that of the left is five pounds, while the lower extremities of an articulated skeleton weigh only three pounds and a half." He was well formed in other respects.

Article XIII.—*Post-Pharyngeal Abscess, with Three Cases.* By Henry S. Downs, M.D., New York.—Dr. Downs reports three exceedingly interesting cases of this affection, all occurring in very young children. The following case, copied by Dr. D. from Dr. Buck's notebook, presents the peculiar features of these cases:—"April 2d, 1858, I visited with Dr Hubbard, an infant son of L. T., nine months old, who was suffering from obstructed respiration, and had but recently recovered from an attack threatening suffocation. Alarmed by the danger of this attack, the mother had sent in great haste for the doctor. The child's lips were livid, his eyes dull and expressive of exhaustion, his respiration labored, but not sonorous, his pulse accelerated, but without febrile heat. While crying, the voice appeared unchanged, and free from hoarseness. On the right side of the neck, and below the angle of the jaw, a cluster of enlarged lymphatic glands (one of which was of the size of a large flattened nutmeg) was visible by their salient elevations above the surface. Dr. H. had already diagnosed the existence of a post-pharyngeal abscess. Inspection with the end of a spoon to depress the tongue, failed to discover anything, owing to the contraction of the velum and pillars of the palate, together with the accumulation of a viscid secretion in the fauces. With the finger, an elastic salient swelling was felt, lying upon the posterior wall of the pharynx, and situated in the median line. The upper limit of it was opposite and posterior to the base of the tongue. After two or three efforts to puncture the swelling with a sharp-pointed guarded bistory, conducted along the left forefinger, previously introduced far back into the mouth, and placed in contact with the swelling, I at length succeeded in accomplishing the object. Instantly a gush of matter followed, that flowed from the mouth, and covered his apron. A quantity was also swallowed. The relief that followed was immediate and marked. This child had heretofore been very thriving and healthy.

"For about four weeks previous it had been ailing with its throat, without exposure to scarlet fever, or other obvious cause. There had been no croupy symptoms, and deglutition had not been much disturbed. In nursing, it would often be obliged to stop, and of late, attacks of dyspnœa had been growing more frequent and more alarming. In one of these alarming suffocative attacks, Dr. H. requested my attendance. The attack had passed off, and the child was comparatively easy at my visit. The subsequent progress of the case was favorable, and the recovery rapid and complete."

(To be Continued.)

Correspondence.

JOSEPH HYRTL,

THE ANATOMIST OF THE VIENNA MEDICAL SCHOOL.

[To the Editor of the American Medical Times.]

Sir:—The amphitheatre of the anatomical department of the great medical school in the Austrian capital, Vienna, was always crowded, for Professor Hyrtl's demonstrations of Topographical Anatomy, although the lecture was at an early hour, for a winter morning, between six and seven. The Lecturer came in, dressed in a very shabby attire, the main features of which were a soiled morning gown, and a stock without a collar, and pushing up his large horn spectacles, began with some humorous remark, exciting a roar all through the class; after which he would go seriously to work, although during the hour and a half many an excellent joke would be made.

There is not that profuse pictorial illustration which adds so much to anatomical demonstrations in America, but there is that which well nigh more than compensates for it: that is, a blackboard, which is kept covered with striking diagrams, drawn by the Lecturer with rapid hand, turning his head half round while at work to see if his audience be satisfied with the delineation.

Nearly all the German teachers whom I have heard cultivate the use of the blackboard to a much greater extent than is common with our instructors, and these pictures, with the artist as his own demonstrator, have an effect only to be imperfectly appreciated by those who have not been taught by them. Hyrtl's animation and wit, as displayed in his lectures, are not without their critics. I heard quite an eminent teacher speak of him as a "play actor." Be that as it may, he holds large classes, whilst Rokitansky, with a world-wide fame, has scarcely a dozen to hear his monotonous readings from books long since given to the public.

Joseph Hyrtl, one of the professors of anatomy in the Imperial University of Vienna, born in Hungary in 1811, studied medicine in Vienna, and two years after graduation, in 1835, was elected Professor of Anatomy in the famous old university in Prague, where he remained until called to the Chair which he now occupies.

His great achievements have been in his minutely injected preparations, and those illustrating some points in comparative anatomy, especially that of the internal ear, and in his published works, which are widely known and appreciated. These last are as follows:—*Handbook of the Topographical Anatomy of the Human Body. A Text-Book of Human Anatomy. Comparative Anatomical Examinations of the Inner Ear of Man and the Mammalia;* with some other works of less importance.

Professor Hyrtl did very much to form the anatomical museums in Prague and Vienna, besides making a very large private collection, which was destroyed by soldiers, with his house, in getting at the insurgents or revolutionists in 1848. While Dr. Hyrtl was assisting in the hospital in the care of the wounded, this was done. He returned home, to find his private effects, with the result of his scientific labors, entirely destroyed. Referring to this, he said: "On seeing the ruins I went to a neighbor to borrow a shirt to replace mine soiled with blood, and a handkerchief with which to weep:" not quite as philosophical as Sir Isaac Newton, when his dog Diamond had destroyed the papers filled with the calculations of years.

The Professor has, however, a new collection, made since 1848, consisting mostly of the skeletons of fishes. This is very large, filling two large rooms, and coming from all parts of the world. He has also a large collection of the *ossicula auditûs* of the mammalia. This is probably the most complete in the world, and for it he obtained a medal at the last London Exhibition. They are arranged on blackboards, and possess the highest interest to the student of comparative anatomy. One of these collections was purchased for a museum in London, the Hunterian I believe. The Professor practised surgery for a little time, but gave it up in disgust to go back to his anatomical studies, after having amputated the leg and thigh successively in a case of malignant disease, and seeing it return in the hip-joint. Hyrtl is a very industrious man, spending his days in dissections in a dirty little room just back of the amphitheatre, with a text-book of anatomy before him. I found him one day, with Gray, thus lying near the infant cadaver which he was at work upon. In person he is tall and well formed, pleasing in speech, and his writings are characterized by originality and humor, combined with lucid expression.

D. B. St. J. R.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

[To the Editor of the American Medical Times.]

Sir:—An adjourned Anniversary Meeting of the above Society was held on the second inst. at the College of Physicians and Surgeons. The attendance was very full, even better than at the preceding meeting. Among those present were some of the oldest members of the Society; those who had filled its posts of honor more than twenty years ago. After the announcement of Committees for the ensuing year, and the election of Delegates to the "American Medical Association," the re-elected President delivered a brief but felicitous address to the Society. Dr. Percy exhibited a specimen of the "Sarracenia Purpurea" in vigorous growth. It was obtained from the bogs in the mountains above West Point. Dr. P. stated that he should say nothing at present of its medicinal properties, but hoped at some future time to make some observations upon its uses which at present he had under consideration. It was well known to all the members present that this is the plant which has been so highly recommended for the cure of small-pox, and which was first brought before the notice of the medical profession by an Indian woman in Canada.

Dr. Elsberg presented a tongue spatula, devised by himself for the purpose of facilitating the performance of laryngoscopy and the examination of the fauces.

It having been intimated that the President had some business of a different nature to bring before the Society, which could only be done with advantage at his own house, the Society adjourned at about ten o'clock, to reassemble at the residence of Dr. Underhill, where they were speedily enlightened as to the nature of the business which was to occupy their attention. Realizing the truth so aptly propounded two thousand years ago "*Omne tulit punctum, qui miscuit utile dulci,*" the sagacious President had prepared a beautiful entertainment, which illustrated in a striking manner the correctness of this ancient theory. Several short and effective speeches were made by officers and members of the Society, in reply to sundry toasts, and so thoroughly was the "*dulce*" mixed up with the "*utile*" that a degree of enthusiasm and good fellowship was awakened, which a dozen more formal meetings might have failed to call forth. Though not strictly scientific in their character, such occasions are unquestionably very beneficial in their results.

Yours etc.,

G. F.

New York, November 7, 1863.

AN ANOMALY IN CRANIAL STRUCTURE.

[To the Editor of the American Medical Times.]

Sir:—Irregularities in osseous structure aside from those produced by the action of morbific causes have hitherto been confined to variations in length and thickness; *i. e.* length of the styloid process and thickness of the cranial walls. A skull now in my possession, which was obtained from a recent dissection, presents the following anomaly. On both sides of the sella turcica there is complete bony union between the anterior, middle, and posterior clinoid processes. A foramen is thus formed by the junction of the first and second, and an arch over the passage-way of the circular sinus by the union of these two with the third. A careful examination of different skulls may discover a tendency in these processes to unite, but I believe there is no case on record parallel to the above anomaly. Although devoid of that practical importance pertaining to variations of the arterial system, it may yet serve to inculcate caution in surgical operations, showing, as it does, possible variations in parts and places least expected.

W. Lockwood Bradley,
Medical Student.

Bellevue Hospital, November 2, 1863.

Army Medical Intelligence.

APPLICATIONS FOR ARTIFICIAL LIMBS.

This application should be made to any of the Department Medical Directors, who, if satisfied of the correctness of the claim, will order a limb from any of the manufacturers who are authorized to supply such limbs. The selection of the manufacturer is left to the applicant.

Proof must be inclosed that the applicant was an enlisted man at the time of losing the limb, and that the limb was lost in the line of duty. This proof, if he is still in service, will consist of certificates from the commanding officer, surgeon-in-charge, or any commissioned officer personally cognizant of the facts of the case. If discharged from the service, his discharge papers must be submitted for examination, with his own affidavit of the time, place, and manner of losing the limb, and, if possible, the certificate of his former commanding officer, or surgeon-in-charge.

The discharge papers will be returned to him.

Instructions as to the measurements of the limb will be forwarded by the manufacturer to the applicant.

Soldiers are not allowed to purchase an artificial limb and receive the commutation value thereof in money, nor will any money so expended be refunded out of the Government appropriation.

Commissioned officers are not entitled to the benefits of the provision made by Congress for supplying "Artificial Limbs for Soldiers."

The following are the manufacturers who are authorized to supply limbs:—Douglas Bly, New York, Rochester, and Cincinnati; E. D. Hudson, New York; Frank B. Palmer, New York, Philadelphia; B. W. Jewett, Washington, D.C.; Chas. Stafford, Chicago; H. A. Gildea, Philadelphia.

The following are the stations of the various Medical Directors to whom the applications should be made:—New York city, Surgeon C. McDougall, U.S.A; Philadelphia, Pa., J. Campbell, U.S.A.; Baltimore, Md., Jos. Simpson, U.S.A.; Washington, D. C., R. O. Abbott, U.S.A.; Cincinnati, Ohio, W. S. King, U.S.A.; Chicago, Ill., J. B. Porter, U.S.A.; St. Louis, Mo., M. Mills, U.S.A.; New Orleans, La., R. H. Alexander, U.S.A.; Louisville, Ky., G. G. Shumard, U.S.A.

GENERAL ORDERS, NO. 351.

War Department, Adjutant-General's Office.
Washington, D. C., Oct. 29, 1863.

The employment of women nurses in the U. S. General Hospitals will in future be strictly governed by the following rules:—

1. Persons approved by Miss Dix, or her authorized agents, will receive from her, or them, "certificates of approval," which must be countersigned by Medical Directors upon their assignment to duty as nurses within their Departments.

2. Assignments of "women nurses" to duty in General Hospitals will only be made upon application by the surgeons in charge, through Medical Directors, to Miss Dix or her agents, for the number they require, not exceeding one to every thirty beds.

3. No females, except Hospital Matrons, will be employed in General Hospitals, or, after December 31, 1863, borne upon the Muster and Pay Rolls, without such certificate of approval and regular assignment, unless specially appointed by the Surgeon-General.

4. Women nurses, while on duty in General Hospitals, are under the exclusive control of the senior medical officer, who will direct their several duties, and may be discharged by him when considered supernumerary, or for incompetency, insubordination, or violation of his orders. Such discharge, with the reasons therefor, being endorsed upon the certificate, will be at once returned to Miss Dix.

By order of the Secretary of War:

F. D. TOWNSEND,
Assistant Adjutant-General.

ORDERS, CHANGES, &c.

Surgeon Bernard Boust, U.S.V., has been relieved from duty in the Department of the South, and will report in person without delay to the General Commanding the Department of the Monongahela, to relieve Assist.-Surgeon J. C. McKee, U.S.A.

Assist.-Surgeon McKee, on being relieved, will report in person to the Surgeon-General in this city, for assignment to duty in the Judiciary Square Hospital.

Surgeon A. E. Stocker, U.S.V., will proceed without delay to Key West, Florida, and report to the Commanding Officer of the United States forces at that place.

Assist.-Surgeon Albert Hartsuff, U.S.A., has been relieved from duty in Washington, D.C., and will repair without delay to Pensacola, Florida, and report in person to the Commanding Officer, United States forces, at that place, for duty.

Surgeon William Hayes. U.S.V., will immediately return to Harpor's Ferry, Va., and resume his duties as Medical Director, 1st Division, and report by letter to the Surgeon-General, U.S.A., by what authority he left the Department of Western Virginia.

Leave of absence for sixty days, with permission to visit Washington, D.C., has been granted to Medical Inspector Keeney, U.S.A.

Leave of absence for fifteen days has been granted to Surgeon E. F. Bates, U.S.V.

Surgeon C. A. Robertson, 159th N. Y. Vols., having tendered his resignation, has been honorably discharged the service of the United States, on account of physical disability.

Medical News.

The work of Dr. Bumstead on Venereal is about to be honored with a translation into Italian.

Dr. J. Foster Jenkins has been appointed General Secretary of the Sanitary Commission, and will remain in New York.

Dr. B. Howard, Assist. Surg. U.S. Army, lately on duty in the army of the Potomac, is on sick leave in New York.

Dr. H. S. Hewitt, Surg. U.S. Army, has returned from the army of Gen. Grant, and is at present at Bridgeport, Ct.

Two operations for lithotomy were performed at Bellevue Hospital, on Saturday, Nov. 6th: one by Prof. J. R. Wood, and the other by Prof. W. Parker.

Maisonneuve is recommending the treatment of hydrocele by the introduction of a probe charged with nitrate of silver, through the canula into the sac, a plan of treatment adopted by Dr. Willard Parker, of this city, several years ago.

Formula for the Capsules of Balsam of Copaiba and Oil of Cubebs, as prepared by E. Queru. Each capsule contains 9 grains of pure Para balsam and 1 grain of essence of cubebs, which represents 13 grains of cubebs berry. The envelope or capsule is made according to the formula in the U. S. Dispensatory.

Dr. Wm. H. Church, Surg. Vols., has resigned his position in the army, and returned to the practice of his profession in New York city. During his term of service, Dr. C. was Medical Director of Gen. Burnside's army, both in North Carolina and in the West. He accompanied Gen. Burnside in his expedition to East Tennessee, and was finally compelled to resign on account of ill health.

The San Francisco *Med. and Surg. Jour.* announces the death of Dr. Gray:—"It is with feelings of deep regret that we perform the painful duty of announcing the death of our late distinguished confrère, Dr. Henry Martyn Gray, who died at his residence in this city, at half-past four o'clock on Thursday morning, 24th inst., aged forty-two years.

"Called from a sphere of usefulness and honor while yet in the prime of life, the end of his earthly existence is justly considered a public calamity by the community in which he lived. Born in the city of New York, Dr. Gray graduated with high honors at the Geneva Medical University. He emigrated to California in 1849, and having established his residence in San Francisco, he soon won for himself a prominent position among his fellow-physicians; while by the genial qualities of his disposition, his high mental endowments, the kindness of his heart, and his numerous acts of benevolence, he surrounded himself with a large circle of warm and devoted friends among all classes of society.

"Dr. Gray occupied a high position in the Masonic fraternity, was President of the San Francisco Pioneer Association in 1861–2, and at the time of his death held the post of surgeon, with the rank of Lieutenant-Colonel, on General Allen's staff."

Dr. Gray was formerly a resident of this city, and will be remembered as an active member of medical societies.

The San Francisco *Med. and Surg. Jour.* says:—"If we estimate our present population at 100,000, our rate of mortality has been less than 1 in 49; showing a degree of salubrity which may be advantageously compared with that of any large city in the civilized world."

The Number of Medical Students now pursuing their studies at our metropolitan schools, is rather under the number registered in October last, and considerably under those registered in 1860, when the number reached 1230. —*Brit. Jour.*

Original Lectures.

LECTURES ON THE MORBID CONDITIONS OF THE BLOOD.

DELIVERED AT
THE BELLEVUE HOSPITAL MEDICAL COLLEGE.
PRELIMINARY TERM, SESSION OF 1863–4.

By AUSTIN FLINT, M.D.,
PROF. OF THE PRINCIPLES AND PRACTICE OF MEDICINE.

LECTURE VI.

Morbid Conditions due to the Presence of Morbid Products.—Pyæmia.—Putrid Infection or Septicæmia.

The morbid conditions of the blood which have been thus far considered, relate to its normal constituents. The presence in the blood of morbid products gives rise to conditions which are now to be noticed. The morbid products which may be contained in the blood are of two kinds, viz. 1st, Those formed within the body of the person affected, and, 2d, Those derived from the body of another person. The latter constitute the matter of contagion.

Of the first kind of morbid products, the only one of which we have much knowledge, is purulent matter or pus. The admixture of this morbid product with the blood gives rise to the morbid condition known as *purulent infection of the blood* or *pyæmia*. It has also been called *pyogenic fever*, *pus-blood*, and the *pus-crasis*. This is a highly interesting and important pathological condition. The presence of purulent matter in the blood in sufficient quantity to constitute a serious condition, occasions effects manifested in the blood itself, in the circulation, and in the solid parts of the body. Of these three orders of effects, the first seems primary, the two other orders being secondary and dependent on the first.

The purulent matter acts upon the blood as a poison. It induces a toxæmic condition. The fibrin decreases. The red globules are diminished in number. Coagulation is hastened, and clots are often found within the vessels and the cavities of the heart. The damage to the blood is great if the quantity of purulent matter exceed a certain amount. A small quantity may not be sufficient to infect the blood, and it is eliminated without inducing the changes just stated. Infection is found to occur more readily in certain conditions of the system, as when the vital powers are depressed and under certain epidemic influences. In experiments of injecting pus into the veins, dogs are found to possess a greater power of resistance to the effects than rabbits.

The circulation is notably enfeebled by the changes of the blood in pyæmia. The pulse is rapid and weak. The feebleness of the circulation progressively increases, and death takes place by cessation of the heart's action, or asthenia. Hæmorrhagic extravasations are apt to occur.

Of the effects manifested in the solid parts, the most striking and distinctive are purulent formations in various situations. These have been called "purulent deposits" and "metastatic abscesses," names which imply an erroneous view respecting their production. It was formerly supposed that the pus in the blood was taken up from some situation in which it existed without the vessels, and then deposited in other situations; in other words the collections of pus in different organs, in cases of pyæmia, were supposed to be made up of the pus contained in the blood. So far as the pus corpuscle is concerned this is physically impossible. The size of the pus corpuscle is such as to prevent its passage through the coats of the vessels. When pus is absorbed, the corpuscles are first disintegrated; its anatomical characters are thus destroyed. It can only enter the vessels from without, as pus, through an opening into a vein. And when contained within the vessels it cannot transude through their unbroken parietes, the corpuscles being larger in size than the red globules of the blood. The purulent collections, therefore, are not, properly speaking, deposits or metastatic, but involve the production of pus in the different situations in which it is found.

Another idea which has been entertained is, that, owing to their size, corpuscles in the blood are arrested in the capillary vessels, occasion mechanical obstruction, and serve as nuclei for fresh purulent formations. They have been supposed to act as globules of quicksilver injected into the veins in the experiments of Cruveilhier. Purulent collections were found in the lungs after these experiments, and in the centre of each collection was a globule of quicksilver. This idea is purely hypothetical, and is disproved by the following fact: The introduction of pus-corpuscles into the blood is not required for the production of the phenomena of purulent infection, but the presence of the pus serum is sufficient. This fact has been proved by injecting the serum of pus into the veins of inferior animals. Experiments also show that certain kinds of purulent liquid are more virulent than other kinds. The pus called ichorous is more poisonous than that known as healthy or laudable.

However produced, the occurrence of purulent collections in different situations is characteristic of pyæmia, as determined by clinical observation, so that these collections constitute evidence of the existence of a purulent infection of the blood. Frequently collections are found in different organs, and numerous collections in the same organ. They vary in size from that of a pin's head to a walnut. They may be circumscribed, constituting, in fact, abscesses, or the pus may be infiltrated. The organs in which they are most apt to occur are the lungs and liver, but they occur in the kidneys, within the joints, beneath the cutaneous integument, and in other situations. The effects manifested in the solid parts are congestions, especially of the form called hypostatic, in the lungs, hæmorrhages, and softening of the muscular structure of the heart.

Pyæmia existing sufficiently to present its characteristic manifestations, is an exceedingly grave condition, generally proving fatal. Whence does it originate? How is it produced? Pus existing without the vessels is not readily absorbed, and large collections are seldom removed by absorption. If not evacuated by surgical interference it makes its way by ulceration into some outlet, and is thus discharged. But when removed by absorption it is eliminated from the blood without inducing the phenomena of infection. Its accumulation in the blood from absorption in sufficient quantity to occasion pyæmia is perhaps possible, but instances, if they ever occur, must be extremely rare. Purulent matter may get into the blood through openings into veins by wounds or by means of ulceration. This is more likely to occur in bony structures than in soft parts, because in the former the orifices are less likely to collapse, but may remain patescent. An abscess may discharge more or less of its contents into a large vein to which it is in close proximity. There are, perhaps, occasional sources of pyæmia, but in the great majority of cases it is attributable to inflammation of the lining membrane of veins or phlebitis.

Phlebitis leads generally to coagulation of blood within the affected vessel, and its occlusion by the clot together with exuded fibrin. This occlusion may be permanent, the vessel becoming obliterated and the blood seeking collateral channels, or the coagulum and exuded fibrin may be gradually disintegrated and the calibre of the vessel restored. No purulent infection occurs in these cases. But pus may be produced within the inflamed vein.

The pus may be isolated by coagula at either extremity of the affected portion of the vessel, the coagula acting as plugs which prevent the passage of the pus into the circulation. The inflamed vein is sequestrated, to adopt the term employed by Cruveilhier, and pyæmia is thus prevented. The pus, under these circumstances, may be gradually absorbed, or it may make its way externally, or into some outlet, and be discharged. If, however, suppuration takes place and the sequestration be not complete, the pus is carried into the circulation and is mixed with the blood. Pyæmia is then produced.

Phlebitis may occur in different situations. It is sometimes seated in the vena portæ. Portal phlebitis is a rare form of disease, and not easily recognised by the symptoms during life. The purulent formations in cases of this disease are found especially in the liver. Phlebitis in various situations is liable to follow injuries and surgical operations. Patients who die shortly after some accidental injury or operation, not severe enough to destroy life by shock, are, in general, cut off by pyæmia.

Inflammation may extend from the structures in different organs to adjacent veins. This may happen anywhere, but it is oftenest observed in cases of caries affecting the bones of the head. The unexpected development of grave symptoms and death in certain cases, is in this way accounted for. After confinement uterine phlebitis occurs, more or less, as a necessary result; and pyæmia is the morbid condition in certain of the puerperal fevers. A patient is delivered without any untoward events, but the system is much reduced by the state of pregnancy. In two or three days the pulse becomes frequent and feeble, slight chills occur with prostration, and, at length, delirium; death takes place with no symptoms denoting any local affection adequate to account for the fatal termination. This is a sketch of cases which all practitioners of much experience must have met with. They are cases of pyæmia due to uterine phlebitis. During the prevalence of certain epidemic influences such cases are frequent, and they occur at times in large numbers, in lying-in wards, from nosocomial influences.

The account of pyæmia just given is believed to be in accordance with the views held by most pathologists at the present time; but the proof that the morbid condition thus named is due to the presence of pus in the blood, it must be confessed is not as complete as could be desired. It was formerly supposed that the existence of pyæmia was demonstrable, the presence of pus-corpuscles being ascertained by microscopical examination. But the best microscopists are now agreed that pus-corpuscles are not distinguishable from the white globules of the blood, and it is probable that they are in fact identical. So far, then, as the anatomical characters of pus are concerned, or, as Virchow styles it, morphological pus, its presence in the blood as a result of phlebitis or of its introduction in any other mode, is not demonstrable. It is impossible, in other words, by means of the microscope, to discriminate between leucocythemia and pyæmia. Virchow mentions that in many of the cases in which phlebitis is supposed to exist, coagula are formed without inflammation (thrombosis), and that under these circumstances, dissolved fibrin, forming a puriform liquid, is carried into the circulation, not true pus. That a morbid condition of the blood exists, giving rise to the phenomena which are described as belonging to pyæmia, is not to be doubted, but it must be considered as doubtful whether the presence of pus-corpuscles has anything to do with the production of these phenomena. As already stated, experiments on inferior animals show that the phenomena of purulent infection of the blood may be produced by injecting pus-serum without the pus-corpuscles.

The existence of pyæmia is to be determined during life by the occurrence of chills, rapidity and feebleness of the pulse, prostration, etc., after wounds, surgical operations, confinement, or when these symptoms coexist, with phlebitis, developed spontaneously in a situation in which it may be discovered. But in some cases there are no grounds irrespective of the general symptoms to suspect phlebitis, for example when the portal vein is affected. In such cases the occurrence of these general symptoms, if they are not otherwise to be explained, should lead to the suspicion of pyæmia. Disseminated purulent collections beneath the integument are determinable during life, and these are important in a diagnostic point of view. Effusion within joints, taken in connexion with the gravity of the general symptoms, is highly diagnostic. This event is liable to lead to the error of mistaking pyæmia for articular rheumatism.

Of the therapeutical indications little need be said. There are no special remedies for pyæmia. A fatal termination is due to the destructive changes in the blood and the secondary affections. A favorable termination must depend on the elimination of the poisonous matter, restoration of the normal condition of the blood, and recovery from the local effects. There are no particular remedies to be directed specifically to these ends. The objects of treatment, in general terms, are to palliate symptoms and sustain the powers of life. Sustaining measures are chiefly indicated; the aim being to prolong life until the processes of restoration are completed. The indications are the same as in the essential fevers and various other affections; and the measures are the same which will be hereafter noticed in other connexions, viz. tonic remedies, stimulants, and nutritious alimentation.

The absorption of pus and other morbid products, or of any animal matter within the body, in a state of decomposition, is supposed to induce a morbid condition of the blood distinguished as *putrid infection of the blood*, or *septicæmia.* The febrile movement and hectic paroxysms with more or less prostration, etc., accompanying purulent collections which have become putrid from contact with air, as in cases of empyema with perforation of the lungs or thorax, are attributed to a morbid condition of the blood thus induced.

Putrid infection is supposed to occur in the puerperal state from the absorption of portions of the placenta remaining and undergoing decomposition within the uterus. The grave general symptoms in certain cases of diphtheria are thought to be due to septicæmia induced by absorption of the decomposed exudation. That the blood may be poisoned by the absorption of putrid matter, is rendered probable by clinical observation and by experiments on inferior animals, but it is not easy to determine to what extent morbid phenomena are referable to this source. In cases of diphtheria, for example, it is perhaps more reasonable to attribute the general condition to the action of the special cause of the disease than to an infection by the products of disease.

Original Communications.

BRONCHOTOMY,

WITH A STATEMENT OF FORTY-THREE CASES.

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(*Concluded from page* 254.)

V. PRESSURE OF TUMORS ON THE TRACHEA.

One of the most common forms of tumor pressing on the trachea, is the aneurismal. This so closely simulates laryngeal disease, that in some cases it is very difficult, if not impossible, to recognise it.* Dr. Stokes says, attention to the following points will prevent an aneurism from being confounded with disease of the larynx:—"1st. Evidence of internal pressure; 2d. Evidence of solidity in the upper portion of the chest; 3d. Proper signs of aneurism; 4th. Difference in radial pulse."

In five of the tabulated cases the obstruction was caused by the pressure of an aneurism on the trachea, in only one of which could this be distinguished previous to death, although examinations were made with this end in view. The history of these cases would seem to afford valuable suggestions in reference to the diagnosis of this disease. In three cases the pain was referred to the top of the sternum, and not to the region of the larynx, as is almost invariably the case when this organ is the seat of obstruction; in three of the cases there was coldness of the extremities, while in all of them the pulse was frequent and feeble; cough, dyspnœa, and dysphagia were also present in each case.

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* Copland's Med. Dict., vol. ii., p. 807.

Case 18.—Supposed laryngitis; aneurism of the arch of the aorta encroaching on the trachea.

Mr. E——, aged 36 years, was, during the month of August, 1856, subject to frequent attacks of dyspnœa, threatening instant death. Patient was a seafaring man, and had always enjoyed uninterrupted good health, with the exception of the present attack, which commenced while on a voyage from Liverpool, when he was suddenly seized with loss of voice, which he never afterwards recovered. His throat also became sore, and was attended with cough. On his arrival, about six weeks ago, he placed himself under the care of a physician, who has attended him since. His symptoms are those of laryngitis, and have been treated judiciously and energetically, but without benefit, and his condition has been growing worse.

On July 29th Dr. Watson saw the patient, and from his examination of the case regarded the obstruction as depending on laryngitis. The condition of the patient at the time of the operation was as follows: He was sitting up in a chair, his head inclining forward, and his elbows resting on the back of another chair. His voice could not be raised above a whisper, and had been in this condition uninterruptedly since the commencement of his sickness. His breathing was comparatively easy, but soon became noisy and stridulous after the effort of conversation. He was unable to lie down in consequence of its bringing on suffocative attacks. Swallowing often caused strangling. There was no marked difference between expiration and inspiration in regard to dyspnœa. Inhalation and exhalation through the nostrils were sometimes practicable, but often impossible. The patient referred the seat of the obstruction to a point lower down than the larynx; pressure upon the larynx in every direction caused no pain. By exploring with the finger the epiglottis and orifice of the larynx, they were ascertained to be in a normal condition. The countenance presented an anxious, haggard appearance. The pulse was frequent, about 120, small and weak, but regular.

Operation.—Tracheotomy was determined upon, and performed by Dr. Buck, with the assistance of Drs. Post, Lente, and Schapps, without the aid of ether. On attempting to lie down an attack of dyspnœa and suffocation was brought on, which obliged us to allow him to sit up. After exposing the trachea and its upper rings, and allowing the hæmorrhage to cease, an opening was made through three of the rings, and a full-sized tube inserted. To our great disappointment no relief was afforded, nor could we perceive that any air passed through the tube. It was noticed that in making the incision through the trachea there was no whizzing noise, such as is produced when the larynx is obstructed. A protracted fit of coughing followed the introduction of the tube, but without any expectoration. It was now evident that the seat of the obstruction was lower down. A small sponge secured to the tapering end of a quill was passed through the tube down to the bifurcation three or four times without dislodging any obstruction. Brandy and water was administered to revive the patient's strength, which he swallowed with no less difficulty than before the operation. Towards morning the patient obtained some relief from his dyspnœa by a copious expectoration of viscid secretion. Notwithstanding this relief, patient died on the second day after operation.

Post-mortem examination revealed a large aneurism of the arch of the aorta, encroaching on the trachea at its bifurcation, and very considerably diminishing its calibre. The heart was considerably hypertrophied, especially the left ventricle.

VI. MEMBRANOUS CROUP.

Case 32 is interesting as showing the effect of croup in suspending labor, and relief afforded by the operation.

Emily White, aged nineteen years, was in her eighth month of pregnancy, and suffering from hysterical convulsions, to which she was occasionally subject. She was a woman of delicate habit and nervous temperament, but presented no marks of constitutional disease. Nothing occurred to call especial attention to her until the evening of the fifth day, when she had another attack of hysteria, accompanied by some dyspnœa and aphonia. The difficulty of breathing subsided, but the aphonia remained. Soon after dyspnœa returned, and an examination of the throat and chest was made; but as no evidence of inflammatory or constitutional disease was discovered, the trouble was regarded as spasmodic, and treated accordingly. On the afternoon of the sixth day her symptoms became much aggravated; the pulse was 120, and full; tenderness over the larynx; cough with frothy expectoration; considerable dyspnœa, with dysphagia. Eight leeches were applied over the larynx. The next morning the dyspnœa was somewhat relieved, and the patient felt more comfortable. She began to complain, however, of pain in the lower part of the abdomen; premature labor being feared, opium was administered with a view to check it, but at noon the membrane was ruptured, the liquor amnii discharged, and the second stage of labor progressed rapidly. The dyspnœa in the meantime became greater, the pulse more rapid and smaller, patient tossing about the bed, and suffering intensely from the pain. The head advanced into the inferior strait, where its progress ceased, the pains still recurring frequently, but producing no effect. After the head had been arrested nearly an hour and a half, the condition of the patient was decidedly worse; the pulse was 140 and very feeble, and the dyspnœa was rapidly increasing. The labor pains, which produced no expulsive force, only exhausted the patient, and it was evident that, unless the breathing could be relieved, the woman would die undelivered. Under these circumstances laryngotomy was determined upon and performed. The relief was instantaneous, and the patient breathed freely, and went to sleep. In the course of three hours a dead child was expelled; the uterus contracted firmly; there was no hæmorrhage, and until midnight everything promised favorably. At this time the pulse, which had been reduced by the operation from 150 to 120, began to grow weaker and more rapid; the respiration continued free, but increased in frequency. In spite of free stimulation she continued to sink, and died at five A.M., about twelve hours after the operation.

The forty-three cases have been analysed in the following manner:

Sex.—Of the whole number twenty-eight were males and fifteen females. Of the cases that occurred at the New York Hospital, all were males except one.

Age.—Of the forty-three cases the average age was about thirty years. The youngest was three years old, the oldest was fifty-two. Thirteen were twenty-five years of age or younger; between twenty-five and forty years there were twenty-six cases; while between forty and fifty-two there were only four cases. In a report of eighty cases from English hospitals the average age was about twenty years; the youngest case was only eleven months old. From which it would appear that tracheotomy, although applicable to all ages, is most frequently resorted to in persons under thirty.

The condition preceding the operation was in nine cases that of nearly complete apnœa; in four the dyspnœa was so severe as to threaten suffocation; in sixteen the dyspnœa was urgent; in nine cases the dyspnœa was connected with difficulty of deglutition; in six only was there aphonia. In Case First (syphilitic ulceration of the larynx) the condition of the patient preceding the operation was improving, as will be seen from the following history of the case.

Feb. 8.—Patient cannot lie down through dyspnœa; expiration seems to be effected with more difficulty than inspiration; expectoration very copious, of viscid mucopurulent matter, and effected with much pain; deglutition excessively difficult, can only swallow fluids. Under the steady and cautious use of mild mercurials and iodide of potassium, these extreme symptoms yielded during the following week, and the patient's condition improved somewhat, his gums being distinctly sore from mercury at the time of the amendment. But the improvement was not progressing; he still suffered from frequent paroxysms of dyspnœa, relieved by copious expectoration, the amount of the latter being excessive; his pulse continued above one hundred, with much emaciation and debility, and great difficulty of swallowing; lungs free from disease. In this condition the operation of tracheotomy was decided upon with the view simply of facilitating the function of respiration, and, by placing the larynx at rest, of contributing to its restoration. The immediate consequence of the operation was most favorable. Expectoration diminished, together with the constant and annoying hawking, spitting, and coughing; breathing entirely free. Capacity to take solid food returned in a few days; sleep was undisturbed. On the twenty-seventh his pulse had fallen to 90 (from 120), and on the ninth of March he was reported to be gaining rapidly, to have lost his phthisical look, and to be growing fat. Six months after the operation patient left the hospital wearing the tube.

The previous treatment in eight cases of syphilitic disease of the larynx was mercurial, in one of which scarification was also employed to relieve the œdema of the glottis. In three cases in which there was a foreign body, a probang was passed down the œsophagus; in one, emetics, and inversion in another, while in the third no treatment preceded the operation. Scarification of either glottis, epiglottis, or tonsils in five cases, and in two it was rendered impracticable on account of the severe dyspnœa which it occasioned. In seven cases counter-irritation and diaphoretics were used; in one the topical application of the nitrate of silver was employed. In one case of wound of the throat an elastic tube was passed into the larynx. In the remaining sixteen cases the treatment was not given.

The obstruction was caused in nineteen cases by syphilitic disease of the larynx; in nine by laryngitis, three of which supervened on wounds of the larynx, and one on typhoid fever; in three by the presence of foreign bodies. In five of the cases the obstruction was caused by the pressure of an aneurism on the trachea, in four of which cases (13, 16, 35, 36) its presence was not discovered until after death. In three cases from œdema glottidis; in three from membranous croup, one of them complicating labor. In one case from tetanus, and one from tonsillitis.

Operation.—Tracheotomy was performed in thirty-one cases, laryngotomy in twelve cases. Ryland, in speaking of bronchotomy, says: "The first great cause of failure is delay,"* and adds, "I can truly say that I have seen several cases lost by delaying the performance of this operation, but never one by opening the windpipe too early." Marshall Hall says: "It is too late to operate when the countenance is pallid, face livid and cold, and pulse sinking."† In seven of the reported cases the patient was apparently in a dying condition, but all rallied after the operation, and then recovered. Dr. Detmold has operated twice when his patient was apparently dead, and both recovered. Dr. Buck says: "It is never too late," he has operated twice under same circumstances with success.

In Case Fifth the operation was attended with considerable hæmorrhage, the fatal effects of which were prevented by the speedy opening of the trachea, and the removal of blood by suction with the mouth. Prof. Brainard says: "He never opens the trachea until bleeding has stopped." M. Maslhieuret states that he never stops to tie arteries or veins unless hæmorrhage is very abundant, as this is best controlled by free respiration.

The immediate result of the operation in twenty cases was great relief of embarrassed respiration; in five cases it was spoken of as being instantaneous; in four cases as partial; while in one case the patient died during the operation.

Termination of the Disease.—Of the forty-three cases twenty-three recovered, and twenty terminated fatally, or a little over one half recovered. In the eighty cases from English hospitals, thirty-three recovered, and forty-seven died, or about two in every three recovered. The youngest in the fatal cases was six years old, the oldest was forty-three, the average being about twenty-nine years. Of these there were nine under the age of twenty-five years; ten between twenty-five and forty, and only one over that age. Of those who recovered the youngest was three years old, and the eldest fifty-two; the average age was about thirty. There were fourteen cases under thirty years, seven between that age and forty, and in two the age was not mentioned.

Of the successful cases the recovery was complete in twelve, and in eleven the tube was still retained, although in several of these latter cases the breathing through the natural passages had improved, as will be seen by reference to the table. In Case Fifth it was thought by Dr. Loomis that the tube might have been previously removed, but was retained by patient's request. Of the fatal cases one died during the operation, one just after its completion, and nine on the following day. The longest duration of any case was eleven days.

In forty-three of the collected cases the operation was followed, in five of them by bronchitis, and in two of these caused death. In the five cases, with one exception, in which the bronchitis was slight, it supervened after the operation for syphilitic disease of the larynx. The same is true in the English cases before referred to. May it not then be, as has been in a measure proved by Virchow, Stokes, Munk, and Graves, that syphilitic disease extends from the larynx into the bronchi, and there gives rise to syphilitic bronchitis? Of this, Dr. Stokes says: "I have known it to take precedence of the affections of the throat, but far more frequently it succeeds to this; the morbid action creeping gradually and slowly along the larynx and trachea into the bronchial tubes."* Will it not appear probable, then, that syphilitic poison predisposes to bronchitis?

PATHOLOGICAL APPEARANCES ON DISSECTION.

In twelve cases necroscopies were made, and revealed the following lesions: in two cases of laryngitis there was found in one the fauces and larynx of a bright red color, and coated with a layer of yellow lymph; in the other the inflammation had extended down, and had given rise to a semi-organized membrane, lining the upper part of the bronchi. In one case there was extensive disease of the lungs, probably caused by a wound. In one case a large abscess had burrowed its way into the deeper portions of the neck, thus compressing the trachea. In Case Sixth there was extensive œdema of the glottis, epiglottis, pharynx, and soft palate, with considerable detachment of the mucous membrane of the mouth from inhalation of steam. In one case there was entire destruction by ulceration of vocal cords and epiglottis, with an opening leading from the œsophagus into the larynx. In five cases there was an aneurism of the arch of the aorta pressing on the trachea.

A CHILD, two years old, was, on August 12th last, presented to the Academy of Surgery by M. Chassaignac, as an example of syphilis communicated by vaccination. The child was examined by MM. Cullerier and Guersant, and the disease declared by them to be a topical specimen of syphilitic vaccination.—*Brit. Med. Jour.*

THE French Medical Association has just held its annual meeting in Paris, under the presidency of M. Rayer. The society is five years old; and already numbers 5,746 members, having from its birth gone on gradually increasing. It consists of ninety local societies; and has at its disposition a sum of about £12,000.—*Brit. Med. Jour.*

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* Ryland, on the Larynx and Trachea.

† American Journal of Medical Science.

* Acton, on Urinary and Generative Organs, p. 499.

REMARKS ON THE
USE OF PERMANGANATE OF POTASSA
IN THE TREATMENT OF HOSPITAL GANGRENE.
WITH CASES.

By F. HINKLE, Acting Assistant-Surgeon, U.S.A.

(Concluded from page 254.)

Case I.—Samuel M. Cambridge, private, Co. F, 95th Pa., Oct. 17th. Admitted to Cambridge Hospital Washington, D.C., May 8th, 1863, with gunshot wound received at the Battle of Fredericksburg, May 3d, 1863. Upon examination found the ball (minié) had passed through the thigh about three inches above the knee-joint antero-posteriorly; entrance internal to the rectus femoris, and exit on a line with the external hamstring muscle, causing compound comminuted fracture of the left femur; splitting the condyle. There was also a flesh wound in the right leg. The treatment pursued up to the period of amputation of the thigh was simple dressings, and the application of Smith's anterior splints. May 29th, 1863.—Patient etherized and a thorough examination was made; found amputation of the thigh was necessary, which was performed. He bore the operation well, in the evening appeared quite bright and cheerful, though much exhausted. Ordered two ounces of wine with morphiæ sulph. May 30th.—Rested at intervals of one and two hours well during the night. He looks well, pulse 100. Skin good, has spells of nausea due to the effect of ether and morphia after the operation. The stump was dressed with simple dressings, and every five hours a cloth saturated applied with the dilute solution of permanganate of potassa, which was made only 30 grs. to the pint of water; it was intended only as a deodorizer and stimulant to the circulation in the stump: it maintained a healthy tone, and prevented sloughing, which so often occurs from feeble circulation in the flaps. June 1st, 1863.—The stump looks well, parts neatly approximated. He was removed to the garden between the wards for fifteen minutes to refresh himself; this created quite a joyful feeling of animation. June 2d.—From this date patient progressed favorably, and on the 1st day of July, the stump had entirely healed. July 1st.—Gangrene set in, the constitutional symptoms were active and very alarming. Pulse 120, intense nausea, vomiting, and bowels very loose. He suffered the most agonizing pains in the anterior crural and femoral nerves, just below Poupart's ligament, for which a lotion was ordered. Tinct. saponis comp. ℥ iv.; Tinct. opii ℥ ij.; tr. arnic. ʒ j. A piece of flannel was soaked in it and applied frequently. Ordered internally sol. quiniæ sulph. ℥ ij. (ʒ ij), vim xerici ℥ ij. Teaspoonful every four hours. Ordered pil. opii et comp. no. vi., one every five hours, until the excessive action of the bowels be arrested. The stump along the line of incision was swollen, its edges showing slight eversions, with large whitish blisters over the cuticle, especially in the incisions. Several spots were sloughed through the skin, from which discharged a thick cheesy liquid, highly offensive in smell. The treatment locally was a constant application every two hours of the solution of permanganate of potassa, one drachm of the salt to a pint of water. The following formula was then ordered—R. Potass. permanganatis ʒj., acid. sulph. gtt. xii. aquæ fluv. Oj. liq., mix; wash, and paint the parts freely every three hours, extending it several inches beyond the disease. A wet cloth with the same solution diluted one half was constantly applied at each dressing. July 2d.—Patient continued very pallid; intense nausea, retains no food on his stomach. Pulse 120, very thread-like, easily compressed. Gangrene has extended about two inches on each side of the line of incision. The parts were much swollen, and presented a pulpous appearance, ash grey color, discharging a thick liquid of the same color. I was peculiarly struck this morning with the little odor emanating from the melting flesh in the progress of gangrene. The nurses in the ward, as well as myself, witnessed it did correct the fœtid odor in this and all the suppurating wounds to which it was applied; the treatment was continued. I visited the patient often after the gangrene set in, and this evening, six o'clock P.M., thirty-six hours after the first symptoms, the disease is arrested. July 3d.—Patient is gradually improving. The gangrene is arrested, and shows signs of separation. Skin beyond assumes a normal appearance, heat and swelling are decreasing, and the shining appearance of the cuticle, where it was raised in blebs, also was removed, leaving nothing now but the gangrenous mass about three inches in width. The bowels have now become quieted; discontinued the op. et camph., and ordered potass. permanganatis grs. xii., aquæ ℥ j., six teaspoonfuls every four hours, so that he had four to eight grains daily of the salt. Continued the solution quinia sulph. and wine, but less frequently. July 4th.—Patient is decidedly better; the wound is cleansing itself from the disease. His general appearance greatly improved, appetite and spirits are returned. He was greeted at an early hour by the arrival of his parents from Philadelphia, who had been telegraphed for, believing it would do much to rally him from the effects of the terrible ordeal he had passed through within the last four days. Treatment was continued, only the strong solution was not repeated quite as often. He was carried out into the open air in the shade daily. July 7th.—The gangrenous mass has sloughed away, leaving a clean wound. July 8th.—The wound is clean, and commencing to repair with granulations. The wound was now dressed with wet lint soaked in the dilute solution of permanganate of potassa. His case from this date did well, and he went home on furlough about the fifteenth day of July, when his wound was nearly cicatrized.

Case II.—Corporal James Hoag, Co. A, 60th Pa. regt., æt. 16, admitted into Jarvis U.S.A. General Hospital, Baltimore, Md., July 17th, 1853, with gunshot wound of right thigh, received at the battle of Gettysburg. Both wounds were healthy, and had nearly healed, when on the 1st of September they became painful, and he could not sleep. Sept. 2d.—The ulcers were irritable, and covered with a dark brown slough; appetite failing; tongue coated, and some fever. ℞. Quiniæ sulph., gr. xx.; acid. sulph., gr. ss.; aquæ, ℥ ij. M. S. a teaspoonful every three hours; also sprts. ferment. ℥ vj., S. two tablespoonfuls every four hours. Sept. 3d.—The wounds are evidently in gangrenous condition, and the disease is spreading. Patient complains of a good deal of pain. Same constitutional treatment continued, with the addition of the local application of the sol. of potass. permanganate every three hours. Sept. 4th.—No improvement; same treatment, only the local remedy applied every two hours. Sept. 9th.—The disease has steadily progressed, and destroyed a large portion of the cellular tissue around the wound, but seems now arrested. Sloughs are still firm, but the line of demarkation is well defined, and the patient is much easier. The same treatment is continued. Sept. 19th.—Nearly all the diseased tissues have sloughed off, and healthy granulations have commenced. The wounds present great cavities, which will take a long time to fill up by granulations. Patient is very feeble, and considerably emaciated, but his digestion seems rallying, and he is getting comfortable and cheerful. Oct. 19th.—The parts that were so much eaten out by gangrene are now granulated up to the surface, and are level with the healthy tissues. Cicatrization is going on rapidly. There is no longer any need of stimulants, for all his flesh has come back, and has a general healthy tone. The lower wound has almost healed, and the other is improving as fast as could be hoped for.

Case III.—Charles McElroy, private, Co. K, 17th Conn., æt. 40, admitted to Jarvis U.S.A. General Hospital, Baltimore, Md., July 14, 1863, with three wounds of leg, received in the battle of Gettysburg, July 1, 1863, treated in the Eleventh Army Corps Hospital previous to admission. His wounds progressed favorably for a month, although the whole belly of the gastrocnemius and soleus muscles was carried away by a fragment of shell. The limb presented a frightful appearance, the vitality having been destroyed far beyond the seat of injury, terminating in extensive suppuration, inflammation, and sloughing. The length of the wound was nearly six inches. Sept. 1st, 1863.—The suppuration and inflammation have entirely subsided; the greater part of the wound is granulated and healed. Sept. 3d.—He was suddenly seized with violent constitutional disturbances: a high grade of fever pains in his head, back, and limbs, with frequent chills. Gangrene set in, and in twenty-four hours opened the entire wound, everting the integument, and the pulpous variety of slough was presented *en masse*, elevating itself fully two inches above the level of the wound, of a dark ash-colored appearance, apparently liquefying the flesh every hour as it progressed. The discharge was of a thick sanious liquid, which was highly pungent and very offensive, so much so that the nurses or those in attendance could scarcely remain in his presence a moment without experiencing sickness of the stomach, and this lasted during the first four days. The patient rapidly sank under the disease, and he had to be hourly watched, night and day, supporting him with diffusible and nervous stimulants and tonics, a good nutritious diet, essence of beef, oysters, etc. He was also placed under the immediate use of permanganate of potassa; from four to eight grains were given in twenty-four hours, which was continued daily for a month, moderating the dose as the patient improved. The concentrated solution was applied with a hair pencil every hour for the first three days, and lint saturated with the dilute solution constantly. The disease yielded on the fourth day. On the tenth day after the arrest of the disease, the entire wound was cleansed of the gangrenous mass, leaving a deep and dangerous wound. The blood-vessels and nerves were exposed in situ, also a part of the fibula. The pencil could be passed up two or three inches under the skin; thus almost the entire posterior part of the leg was turned into a very frightful looking wound. Sept. 20th.—Patient gradually began to recover his appetite, which was entirely gone, and it was with the greatest difficulty he could be supported through the disease, and so great was his prostration that all had despaired of his life for days. Nov. 5th.—He is now rapidly improving, and the wound has granulated up beyond our expectation, and more than three-fourths of it has cicatrized under the treatment.

I would, in conclusion, state, that in private practice at my home in Marietta, Penn., I have successfully used the permanganate of potassa in the treatment of leucorrhœa and other uterine affections. In one case of a melanoid cancer of the scalp, involving the bones of the skull, where I removed the tumor, and it afterwards returned, I have, by using the permanganate in the form of an ointment in the proportion of 30 per cent. to an ounce of simple cerate, been enabled to correct the fœtid odor of the discharge, and also have succeeded in retarding the spread of the disease. In purulent ophthalmia I would recommend its use as a collyrium; and finally I feel confident that in many instances it can supplant the use of nitrate of silver, etc., as a more safe and powerful escharotic.

I herewith give the correct formula of liq. potassæ permanganatis, which is 85 grs. to the fluid ounce of water, dissolved by heat, as furnished by Henry Bower, chemist, of Philadelphia, from whom we are supplied by Government:—

[To the Editor of the American Medical Times.]

Sir:—At my request, Acting Asst. Surgeon F. Hinkle, U.S.A., an experienced physician and surgeon of twenty years' standing, has kindly furnished your valuable journal with a highly interesting and important report on the use of permanganate of potassa in the treatment of hospital gangrene. He was the first, I believe, to recognise its value as a remedial agent in arresting that terrible malady, hospital gangrene. In some sixty cases of the disease occurring in this hospital after the battle of Gettysburg, we have together given the disease especial attention, and are satisfied that when properly applied, the salt possesses wonderful virtues, and is far superior and more certain in its action than any other remedy we have yet tried. To the military surgeon it must be marked in the same category with such medicines as quinine and opium. The disease was not new to me, for some years since, while an assistant in the New York Hospital, I witnessed it rage to a fearful extent in the surgical wards there, where we treated it with nitric acid and antiseptic dressings. In cases where the pain was excessive, I was the first to use the local application of chloroform by touching the gangrenous parts with a hair pencil, previously immersed in chloroform. The use of nitric acid has not given that satisfaction, or the happy results we claim for the permanganate of potassa. The report of Dr. Hinkle embodies much valuable information in using the agent, and should be read with attention. In the treatment of our cases we became quite expert, so much so that in several instances we could predict the time in which the disease would be arrested, and never felt alarmed that it would become uncontrollable. The only case that terminated fatally was where the disease extended from the foot to the knee, and where we tried nitric acid, alternating it with the permanganate of potassa. The man was of bad constitution, and after death the post-mortem examination revealed pyæmia. It has occurred to both of us, whether there is not some pathological connexion between these two diseases, and I concur with the opinion expressed by Dr. Hinkle, that hospital gangrene depends on an impoverished or poisoned condition of the blood, not yet fully understood.

DeWitt C. Peters, Asst. Surg. U.S.A.,

Jervis Gen. Hosp., Baltimore,
Nov. 6th, 1863.

Reports of Hospitals.

CHURCH U.S.A. GENERAL HOSPITAL, MEMPHIS, TENN.

C. H. CLEVELAND, Act. Asst. Surgeon U.S.A., in charge.

REPORT OF FIVE CASES OF HOSPITAL GANGRENE,

By D. C. LLOYD, medical cadet, u.s.a.

Case I.—Hiram Butkin, aged twenty-two years, private, Co. G, 28th Wisconsin Infantry, was wounded at Helena, Ark., July 4, 1863, in the inner side of the middle third of the right thigh; ball passing through, and coming out at the opposite side. The inner wound had cicatrized. The outer one still suppurating. On the nineteenth of July he felt a sharp pain in the inner wound, and in two days ulceration commenced, which upon investigation was found to be gangrenous. Labarraque's solution and sulphate of zinc were applied, but the gangrene extended. He was transferred to Church hospital from the Union hospital, September 1, 1863. Patient on admission is very weak and depressed, and is anxious to have his thigh amputated. His general complexion is of a light sallow hue; skin moist; appetite poor; tongue moist and clean; pulse 87, full; temperature of the body 92°. His wound presents dark gangrenous sloughs, three-fourths of an inch in depth, one and a half inches transversely, and four longitudinally. The edges of the wound are inverted, and of a livid hue. The cellular, muscular, and subcutaneous tissues are involved, emitting a fœtid odor, and copious exudation of a reddish brown color. The parts were well denuded of destroyed tissue with the forceps and scissors, and thoroughly syringed with warm water, and then swabbed out with a piece of dry cloth wrapped around a stick. The compound solution of bromine (Smith's) was applied, and the wound dressed with simple cerate. Stimulants were ordered every two hours, also nourishing diet. On the 5th he had diarrhœa, which was controlled by Hope's mixture. Having obtained some pure bromine on the 10th, the wound was thoroughly cleansed; the patient put under the influence of chloroform, and the bromine applied to the wound by means of a swab. His bowels are regular, and he says he sleeps well; appetite poor; tongue clean, and moist; skin moist; pulse 120, regular, but weak; temperature 92°. September 12.—General health improving, spirits enlivened, appetite improved, says he sleeps well; tongue moist; skin moist; pulse 75, full; temperature 95°; bowels regular. The surface of the wound is free from gangrene, but the intermuscular tissues are still gangrenous, and the wound on the outer side of the thigh discharges fœtid, ichorous matter in considerable quantity, which has a strong gangrenous odor. Warm water was injected with a syringe through the wound, from the inner to the outer side, and the dead tissue dissected off as clean as possible, which prepared the wound for the action of the bromine, which was injected in both openings with a small glass syringe, after which simple cerate dressings were applied. On the 14th, at which time a thorough cleansing could be made, no gangrene remained: no fœtor attended the wound. The discharge was of a laudable character from both orifices. The patient's general health began to improve.

Since the 14th he has continued to improve without any apparent relapse, with the exception of a slight attack of diarrhœa, which was readily controlled. The wound has granulated admirably; the intermuscular spaces are now (Oct. 1) all closed, and cicatrization is going on. The patient is convalescent.

II.—Allen Claud, aged forty-one years, private, Co. H, 22d Iowa Vols., was wounded in the left arm at Vicksburg, May 22, 1863. His arm was amputated on the following day by a Confederate surgeon, at the upper and middle third, without the benefit of an anæsthetic. After the lapse of a few days, he was sent to Memphis, Tenn., and placed in the Webster hospital, where his wound progressed favorably, and had completely cicatrized, with the exception of a small spot, the size of a hazel-nut, in which gangrene showed itself on the seventh of August. He says there were gangrenous patients in the ward, and all the wounds were cleansed with the same water and sponge. The stump had been cauterized with nitric acid, and the liq. ferri persulphatis had been applied. Quinia had been administered internally. He was transferred from the Webster to the Church hospital, August 13, 1863.

On admission his general system is debilitated. He says he feels very weak, and fears he shall not get well; expresses desire to be relieved by death. His appetite is poor; tongue clean and moist; skin moist; pulse 120, of moderate strength; temperature of the body 92°. His wound is very fœtid, the sloughs presenting a dark grey appearance, extending one inch in depth, forming a ring of gangrenous tissue around the stump, and extending one and a half inches into the intermuscular spaces. The dead tissue was dissected off as far as practicable, and the part thoroughly cleansed with warm water. Bromine was applied by means of a swab, and the part covered with a cloth spread with a simple cerate, and then bandaged. No improvement could be recognised on dressing the wound on the morning of August 14, owing to the fact of the bromine not reaching the vitalized tissues. Labarraque's solution was applied, and ordered to be repeated every two hours, diluted in the proportion of two ounces of Labarraque's solution to a pint of water. The patient ordered nourishing diet, and half an ounce of brandy every two hours.

Aug. 14th.—The patient's appetite unimproved. Says he has pain at night, but sleeps well in daytime. His tongue is moist; bowels regular; pulse 112, weak. Quinine was again applied, the part enveloped with a cloth spread with simple cerate, the whole well bandaged. On the 21st he was put under the influence of chloroform; our supply of bromine being exhausted, nitric acid was applied by Dr. Weeks. While cleaning off the dead structure, hæmorrhage occurred from the brachial artery, which was immediately ligated. On the 22d there was a greater discharge of serum than formerly, and a part of the dead tissue was detached, which readily came off. Labarraque's solution was applied, and continued until the 24th, when nitric acid was again resorted to. There was no marked improvement in his general system. His pulse was 78, full; temperature 91°. On the 27th he had slight febrile symptoms; skin dry, tongue moist; no appetite; pulse 112, weak; temperature 88°. His wound was improving; no fœtor; the discharge was of a laudable character. A few dark grey spots remained on the muscular tissue; the destroyed subcutaneous and intermuscular tissue came readily away, leaving a clean surface, which was properly cleansed, and compound solution of bromine applied. September 1.—The patient's general health is considerably improved; he is lively, and walks about the room; pulse 66, full; temperature 87°; complexion fair; skin moist; appetite good; his wound is granulating finely; no gangrene; no fœtor. Simple dressing was applied. He continued to improve without any intermission, except a slight attack of diarrhœa, which was controlled by astringents, until the tenth, when he was sent to Webster hospital, cured.

This patient received nutritious diet, and stimulants every two hours. His wound was well syringed with warm water every day, care being taken to clean out all the sulci and sinuses that contained destroyed tissue. Oakum was applied, wet with Labarraque's solution, whenever the solution was used. The skin had adhered to the muscles, and cicatrization commenced around the margin of the wound. The interspaces were filled up by granulations, and the patient anticipated returning home in a few days, on furlough.

III.—John Brown, private, Co. K, 99th Ill. Vols., was wounded at Vicksburg on May 2, 1863, in the middle third of the left thigh, by a ball, producing a flesh wound. He was sent to the Union Hospital, where he received proper attention; his wound granulated healthily up to June 22, when gangrene set in. Labarraque's solution of soda was applied, and afterwards the liq. ferri persulphatis was substituted. The gangrene extended, and he was transferred from the Union to Church Hospital, September 1, 1863.

The patient is somewhat emaciated, and his general system debilitated. His mind is depressed; skin dry; complexion sallow; tongue moist; appetite good; pulse 95, weak; bowels regular; sleeps well, and has no pain in his wound. He has gangrene in the anterior and outer aspect of the middle third of the left thigh. The wound measures three inches transversely, and four longitudinally. The cellular and intermuscular tissues are involved. A sulcus is formed around the margin of the wound, one-half an inch in depth, the edges of which are everted, jagged, and extremely sensitive to the touch. The base is covered with a grey, tenacious slough. The wound was well trimmed with the forceps and scissors, the moisture absorbed with a piece of cloth, and the compound solution of bromine was applied by means of a swab into the sulci, and covered with a cloth spread with simple cerate. On the 2d Labarraque's solution was applied, and continued until the 6th, when the compound solution of bromine was substituted. There was no change constitutionally, except that his skin became moist, which heretofore had been dry. The wound gradually improved until the 10th, at which time the parts which had become clean assumed a phagedenic character. The following notes were taken. Patient's mind is more depressed. He says his appetite is good, and he sleeps well. His tongue is moist and clean; skin moist; complexion sallow; bowels regular; pulse 112, of good strength. The wound was properly cleansed, and bromine applied. A cloth spread with simple cerate was placed over the wound, and the whole enveloped with a piece of oiled silk. September 12.—The sloughs came readily off this morning, leaving a clean surface, attended with no fœtor. Labarraque's solution was applied to stimulate the wound, and kept in direct contact with it, by means of oakum well saturated with the solution diluted (one part to eight of water) every two hours. September 13th.—Granulations are abundant throughout the whole extent of the wound. The patient's tongue is moist and clean; appetite good; skin moist; bowels regular; pulse 120, of good strength; temperature of the body 92°. September 16.—The patient is dull and sleepy; is with difficulty aroused, and pays no attention to what is going on around him. He has a harsh, dry cough. There is evident depression on the right side of the chest, which does not expand during inspiration. On percussing the chest posteriorly, there was dulness over three-fourths of the right lung. Auscultation over the dull part reveals tubular breathing, with bronchophony. Sputa is of a gelatinous consistence, but trifling in quantity. Respiration 28 per minute. His tongue is moist; appetite poor; pulse 120, of good strength. Skin dry; complexion sallow; temperature 82°. He does not complain of any pain or tenderness on pressure. September 20.—Respiration quite natural. He says he only feels a little weak, but otherwise is well. His skin is normal; appetite improved; tongue moist; pulse 96, full and regular. Temperature 83°. His wound is granulating, the edges have become adherent, and cicatrization is extending from the edges. He has gone home on a furlough, which he received on the 23d.

(*To be Continued.*)

American Medical Times.

SATURDAY, DECEMBER 5, 1863.

FEDERAL PRISONERS AT RICHMOND.

> —— "Doomed to famine, shackles, and despair,
> Condemned to breathe a foul, infectious air,
> In sickly hulks, devoted while they lay—
> Successive funerals gloomed each dismal day."

The report of the surgeons just returned from their imprisonment in Richmond, gives us the first entirely trustworthy account of the condition of the Federal prisoners in that place. Vague rumors have reached the people of the North of the destitution and suffering of their friends and brothers who have unhappily fallen into the hands of the rebels, and the occasional return of small companies, wasted, wan, and dying, has tended to confirm the report. But of the real nature of their privations and miseries we have not before had a reliable statement. The Report was drawn up by a committee appointed at a meeting of the surgeons on board of the steamer on which they returned from Fortress Monroe, and is signed as follows:—Daniel Meeker, U. S. V.; O. Q. Herrick, Surgeon 34th Ill. V.; W. M. Houston, Surgeon O. V. I.; A. J. Herrick, Surgeon 17th O. V. I.; J. Marcus Rice, Surgeon 14th Mass. Vols.; John F. Luek, Assistant Surgeon U. S. Navy; and Augustus A. Mann, Assistant Surgeon 1st R. I. Cavalry.

In the following extracts we present the more material portions of this important document:—

"The officers, about 1,000 in all, and representing nearly all grades of both branches of the service, are confined in seven rooms of Libby prison—a building formerly used as a warehouse; each room is 43 feet wide and 102 feet long, and affording to each prisoner but about 276 cubic feet of air. The rooms have unplastered walls, partitions, and ceilings; but few of the windows are glazed, being either open to the full sweep of cold winds, or closed with boards or canvass, either of the latter, when used, rendering the rooms dark and cheerless; one of the rooms is used exclusively as a kitchen and dining-room, while portions of others are necessarily devoted to the same purpose, and but nine scantily furnished and medium-sized cook stoves are supplied the prison; the officers have to do their own cooking, and the supply of wood for this purpose is often insufficient, and occasionally for half a day none at all is sent in. A privy and sink render foul and disgusting one end of each room, polluting at times the air of the entire apartment. None are permitted to leave this building of accumulated and accumulating horrors till borne to the hospital, or happily exchanged. The enlisted men are confined in various places. At the time the Surgeons left Richmond there were about 6,300 soldiers held on Belle Island in James river, near the city, and about 4,000 soldiers and 150 sailors and marines in buildings similar to and in the immediate vicinity of 'Libby.' In the buildings, the condition of the men is about the same as that of the officers in 'Libby,' only they are much more crowded. The condition of those on the island is much worse. An insufficient number of tents are furnished to protect them from the cold and rain, and no blankets or any other bedding have been given them by the Rebels. Only one surgeon is assigned to Belle Island, and he makes but one visit a day, during which he does not enter the inclosure where the men are kept, to see those too sick to walk, but attends to those only who are able to come to him; when the neglected men are sent to the hospital it is often too late. None of the privates in the prisons about 'Libby' are furnished with bedding of any kind. A member of this Committee received a letter from a man belonging to the same command, and confined in the building opposite 'Libby,' worded thus: 'Doctor, we beg of you to try and get us something, either clothes or blankets, to keep us warm; we have no fire in the building to warm us, have nothing either to lie on to cover us, and suffer greatly from the cold.'

"In 'Libby' stoves for heating purposes have recently been put up in some of the rooms, but no fuel of any description has yet been given to render them useful. At one time the rations issued consisted of about three-fourths of a pound of wheat bread, one-fourth of a pound of fresh beef and two ounces of beans, and a small quantity of vinegar and salt for each prisoner per day. Subsequently the same quantity of corn bread made of unsifted meal, and rice instead of beans, were issued in the same quantities, or in lieu of beef and rice two or three small sweet potatoes, and quite often, more particularly within the last two weeks, absolutely nothing except the three-fourths of a pound of corn bread has been issued to each prisoner to satisfy the gnawings of hunger for twenty-four hours. On the 10th of this month the men on Belle Island did not get a meal of anything to eat till 4 o'clock P. M. The Committee unanimously agree that the rations furnished Union prisoners by Rebel authorities at Richmond are not sufficient to prevent the prisoners from suffering from hunger, and thus becoming debilitated, and very susceptible to disease. Some of the Committee have seen men brought from Belle Isle to the prison hospital literally starving to death; and a United States Army officer of high rank and undoubted veracity, then and now a prisoner in 'Libby,' told a member of this Committee that while on a visit to Belle Island recently, whither he went by permission of the Rebels, the prisoners there followed him in crowds as he walked around the inclosure, and cried to him with eager voices, 'We are hungry; send us bread; send us bread.' Were it not for supplies sent from home, none of those confined in Libby, and other prisons, would escape the pangs of hunger."

It appears from this communication that there are about 10,000 prisoners still confined in and about Richmond. Of these 1000 are in a condition to be classed as sick men, and are treated as such. The mortality among this number is rated at the enormous figure of 50 per day or 1500 monthly;

a daily mortality of 5 per 1000, or an annual mortality of 1850 per 1000. The diseases prevalent are diarrhœa, dysentery, and typhoid, the causes of which are found in the treatment to which these wretched men are subjected. They are either huddled together in small unventilated rooms, or exposed, with insufficient clothing, to the inclemencies of the weather. And to these causes of disease must be added that most potent of all, semi-starvation.

It may be said, in extenuation of these barbarities, that the rebels are compelled to treat their prisoners with apparent inhumanity owing to their want of food, clothing, and other necessaries; but there are abundant proofs that most of this cruelty is deliberately inflicted. It is asserted in this report that:—

"Officers have been compelled to scrub the floors, clean the water-closets of the prison, and perform other menial services. All are and have been, at all times since their imprisonment in 'Libby,' subjected to insult and brutal treatment on the part of prison subordinates, and the Captain and Inspectors of the prison, when applied to, not only do not rebuke their subordinates, but encourage them to further offensive conduct. Upon the most trivial charges, officers have been confined from twenty-four hours to several days in damp dungeons under the jail, and there fed only on bread and water. An officer, for doing that which certainly did not merit the term offence, was put into one of these dungeon-cells, though at the time convalescent from typhoid fever, and too weak to do anything. Not more than 200 blankets have been given to the prisoners in 'Libby' by the Rebels. Were it not for those received from home and furnished by the Sanitary Commission, all would suffer very much. Twice within the past week the floors of the prison have been scrubbed at sundown, then through the cold night following, with no fire to drive off the moisture, officers must lie on those disease-engendering floors, or walk the floor till morning brought relief by bringing sunlight. On two other occasions, the floors were scrubbed nearly half an hour before the officers were ready to arise from their beds, and thus in various ways do the authorities seek to make our condition not only uncomfortable but dangerous."

The report of the released surgeons will form a most melancholy chapter in the history of this war. Fearful as has been the sacrifice of life on the battle-fields, it appeals less to our sympathy than the suffering in the prison-house of Richmond. In striking contrast with the inhumanity of the Rebel authorities in their treatment of prisoners, is the conduct of the Federal Government. All prisoners are provided with food and clothing in abundance, and the sick have the kindest ministrations of our hospitals. No word of taunt, or jest, or reproof is spoken, but they are treated with all the tenderness that paternal affection can bestow on erring children. The Rebel prisoners return fat and well clothed, ready to do efficient service again against their rightful Government.

THE WEEK.

The Provost-Marshal General has issued a revised list of diseases and infirmities which disqualify for military service, and for which drafted men are to be rejected as physically or mentally unfit for the service. This revision renders the list much more complete than heretofore. Much is still left to the discretion of the examining surgeon, but as compared with former lists of causes of exemption from physical disability, it is a great improvement.

Women nurses in U.S. General Hospitals have proved a failure, except in a few isolated instances. The failure is due to the want of properly educated and thoroughly devoted women adapted to this work. The Sisters of Charity is the only organization that have as yet, in our military hospitals, succeeded in utilizing women's labor. Miss Dix still continues to exert herself to introduce women into hospitals, but with only partial success. A recent order of the Secretary of War still gives her full power to assign women to hospitals, but it is doubtful if anything useful will result until women are thoroughly trained to this special work.

Correspondence.

INTERNATIONAL SANITARY COMMISSION.

(To the Editor of the American Medical Times.)

A month ago (Oct. 26th, 27th, 28th, and 29th), there was assembled at Geneva, Switzerland, an International Conference, the character and purposes of which are significant of the progressive civilization of the age, and humane spirit and life-saving mission of the medical profession. At that Conference, entitled a "*Conference Internationale pour étudier les Moyens de Pourvoir à l'Insuffisance du Service Sanitaire dans les Armées en Campagne*," were gathered the following distinguished delegates from the various nations of Europe:—

M. le docteur Unger, from Austria (Surgeon-in-Chief of the Austrian Army).
Surgeon-in-Chief Steiner, from Baden.
" Theo. Dompierre, from Bavaria.
" Don N. A. C. Landa, from Spain.
" Boudier, from France.
M. de Reval, from France.
M. Chevalier (Consul), from France.
Dr. Rutherford (Inspector-General of Hosp.), from England.
Mr. Mackenzie (Consul), from England.
Dr. Oelker, from Hanover.
Major Brodreck, from Hesse.
M. Capello (Consul), from Italy.
Prince Henry XIII., from Prussia.
Dr. Lœffler, from Prussia.
Dr. G. Housselle, from Prussia.
Dr. Basting, from Holland.
Capt. Van de Velde, from Holland.
Dr. Gunther, from Saxony.
Capt. Alex. Kirriew, from Russia.
M. E. Essakoff, from Russia.
Dr. Skœldberg, from Sweden.
Dr. Edling, from Sweden.
Dr. Hahn, from Wurtemberg.
Dr. Wagner, from Wurtemberg.
M. F. De Montmollin, from Switzerland.
Dr. Lehmann, from Switzerland.
Dr. Briere, from Switzerland.
M. F. De G. Montmollin, from Switzerland.
Prof. Landoz, from Switzerland.
M. Moratel, from Switzerland.
Dr. Engelhardt, from Switzerland.
M. M. General Dufour, President.
Henry Dunant, Secretary.

These distinguished delegates assembled at Geneva, bearing official credentials from the chief authorities of the nations and departments of public service they represented, and after days of discussions, the full reports of which have not yet reached us, they put forth the following embodiment of the conclusions they had reached in conference. We quote from a copy just received from M. Dunant, the Secretary.

"The International Conference, desirous to render aid to the wounded in those cases where the army sanitary service is insufficient, adopted the following resolutions:

"1. That in each country there exist a committee whose mission is to assist in time of war, if it is required, in providing by all the means in its power for the sanitary wants of the armies. The committee will organize itself in such manner as shall seem most useful and convenient.

"2. Sections, without limit in number, may be formed for the purpose of aiding this committee, and which shall act under its general direction.

"3. It shall be the duty of the committee to place itself *en rapport* with the government of its own country, in order that its service may be received, if there is need.

"4. In time of peace the committees and the sections shall look for the best means for rendering themselves really useful in time of war, especially in preparing material help of all kinds (*secours matériels de tout genre*), and in endeavoring to form and instruct volunteer nurses (*infirmiers volontaires*).

"5. In the event of war the committees of the belligerent nations shall furnish, according to their means, relief (*secours*) to the respective armies; their practicular duty is to organize and set at work the volunteer nurses (*infirmiers volontaires*), and to prepare, in accordance with the military authority, the places in which the wounded shall be attended.

"They may solicit the co-operation of the committees of neutral nations.

"6. Upon application and with consent of the military authorities, the committees shall send the *infirmiers volontaires* upon the battle-field; they shall, at such times, be under the direction of the chief military commander.

"7. The *infirmiers volontaires* who follow the army must be provided by their respective committees with all necessary means for their sustenance.

"8. That, in every country, they wear as uniform, a white band (?) upon the arm (*brassard*) with a red cross.

"9. The committees and sections of the various countries may assemble an International Congress to communicate the results of their experience, and to consult upon the measures to be pursued in the interest of the work.

"10. The exchange of communication between the committees of the several nations shall be provisionally made through the committee at Geneva.

"*Besides the above resolutions, the Conference expresses the following wishes*:

"A. Let the governments grant their highest protection to the committees of relief which shall be formed, and facilitate as much as possible the fulfilment of their mission.

"B. Let *neutrality* be proclaimed, in time of war, by belligerent nations, for the ambulances and the hospitals, and let it be equally admitted, in the most complete manner, for the *personnel* of the sanitary staff (*personnel sanitaire officiel*), for the *infirmiers volontaires*, for the country people who may go to assist the wounded, and for the wounded themselves.

"C. Let a uniform distinctive badge (*signe*) be recognized for the sanitary corps of all armies, or at least for the persons of the same army who are attached to that service. Let a uniform flag (*un drapeau identique*) be also adopted for ambulances and hospitals in all countries."

Though this remarkably harmonious and earnest conference of the international delegates of Geneva is a spontaneous movement of great-hearted men, who have sought the approbation of their respective governments in behalf of the claims of humanity and Christian civilization, we may thank God that the bloody fields of our national struggle, and the successful example of the Sanitary Commission of our army, have served to hasten and to confirm the wise deliberations of the international delegates who have just closed their conference at Geneva.

In a recent number of Dr. Henri Favre's "*La France Médicale*," the moving spirit in originating the Geneva conference, and the confirming example of the feasibility of the proposed work, are thus mentioned:—"In our day," writes Dr. Favre, "every well inspired word is treasured up (*est recueillie*). M. Dunant, therefore, has not preached in vain; and as a proof, we have the application which has just been made of this all-spontaneous creation. It is in America that this idea *has become practical*," etc.

The gentleman, M. Dunant, who set on foot this humane movement in Europe, was following the lines of the belligerent armies in the Italian campaign; and at Solferino he found such scenes of war as he attempted to pass over that field while yet the smoke of the battle lingered, that he turned and set himself to the work of instantly organizing an impromptu corps of *infirmiers volontaires*. The record of that timely and merciful work is in the hearts of the multitude of mutilated sufferers, who, but for the succor which that noble man and his obedient helpers rendered, would not now be able to recount the scenes of that memorable battle-field. And the excellent men who have so promptly and so emphatically responded to the demands of humanity in not only mitigating the horrors of such fields of blood, but in a practical advocacy of the sacredness of human life, have joined in a movement that shall soften the very passions of war, and help to remove its causes.

Yours, &c.,
Elisha Harris.

New York, Nov. 30th, 1863.

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GYMNASTIC TRAINING FOR THE SOLDIERS.

[To the Editor of the American Medical Times.]

Sir:—One of the chief objects I had in view in my recent European tour, was to obtain information that might be useful in the conduct of our present civil conflict. Much of this has been already communicated through the medium of your columns and other channels; this, however, constitutes but a small part of the material collected; and I propose, with your consent, to present to your readers from time to time, such other facts and considerations as seem to have a practical interest and bearing at the present time.

During my residence in London I attended a lecture at the "Royal United Service Institution" (May 23, 1862), delivered by **Archibald MacLaren**, Esq., Principal of the Gymnasium at Oxford, on "*The Value of a Gymnastic Training to the Soldier.*" Deeming the subject, as well as the remarks of Mr. M., of very high importance, I took very full notes; but having subsequently requested a copy of the lecture from the author, should it be published, in order to embody some of its facts and statements in some of my letters, Mr. M. has been so kind as to furnish me one, and you will doubtless oblige many of your readers by quoting the concluding remarks and "Tabular Statement of Measurements" (pp. 8, 9, 10, 11, 13). It may, perhaps, also be well to state that gymnasia have been recently established in connexion with all the military barracks in Great Britain, under teachers who have been expressly trained for the purpose by Mr. MacLaren, the most accomplished instructor, undoubtedly, in this department in the kingdom. Would it not be well to have gymnasia established in all our "Camps of Instruction," as well as among all our regiments, where the soldiers should be regularly drilled in these, as well as the usual manual exercises; which, although essential, are not calculated to develop the entire system of muscles, and the greatest bodily efficiency and endurance. Yours, etc.,

Charles A. Lee, M.D.

Peekskill, Nov. 29, 1863.

"Many years ago I instituted in my gymnasium at Oxford a series of measurements, by which I could ascertain the state of the development of all pupils at the commencement of their instruction, and, these measurements being repeated at given intervals, I could know the rate of their advancement. The revelations made by this system of periodic measurements have been such, as to sustain me in devoting my entire energies to the completion and extension of my system of exercise. I find that to all, child or adult, weak or strong, it gives an impulse, a momentum to the development of his resources, which nothing else can give;—and which nothing can take away, because it is not a thing acquired, a mere mental or physical acquisition; it is the man altered, the man improved, the man brought nearer to the state he was designed to hold by the nature of his organization.*

"But the question will naturally present itself, Would the same results be obtained from a similar system of bodily exercise by the men who fill the ranks of our Army as by the youths passing through our Universities? I think the statements which I have now to make, will satisfactorily answer this question.

"The first detachment of non-commissioned officers, twelve in number, sent to me to qualify as instructors, were selected from all branches of the service. They ranged between nineteen and twenty-nine years of age—between five feet five inches and six feet in height—between nine stone two pounds and twelve stone six pounds in weight—and had seen from two to twelve years of service. I confess I felt greatly discomfited at the appearance of this detachment, so different in every physical attribute; I perceived the difficulty, the very great difficulty, of working them in the same squad at the same exercises, and the unfitness of some of them for a duty so special as the introduction of a new system of bodily training into the army—a system in which I have found it necessary to lay down as an absolute rule, that every exercise in every lesson shall be executed in its perfect form by the instructor, previous to the attempt of the learner; knowing from experience how important is example in the acquisition of all physical movements, and how widely the exercises might miss of their object if unworthily represented by an inferior instructor. But I also saw, that the detachment presented perhaps as fair a sample of the Army as it was possible to obtain in the same number of men, and that if I closely observed the results of the system upon these men, the weak and the strong, the short and the tall, the robust and the delicate, I should be furnished with a fair idea of what would be the results of the system upon the Army at large.

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* A few of these results I have made known in a paper read by me at the meeting of the British Association at Oxford two years ago, and since published in "Macmillan's Magazine," Nov. 1860.—A. M.

"I therefore received the detachment just as it stood, and, following my method of periodic measurements, I carefully ascertained and registered the developments of each at the commencement of his course of instruction, and at certain intervals throughout its progress. A tabular statement of these measurements will appear, I believe, in the forthcoming blue book, as they were furnished by me to Dr. Logan, the Inspector-General of Hospitals, with whom I have had the pleasure to be associated on the Committee appointed to consider the question of the introduction of these exercises into the Army; but I may here mention that the effects were beyond my most sanguine hopes, and equal to any precedent among the youths in those higher positions of life among whom my observations had been hitherto chiefly made. The muscular additions to the arms and shoulders and the expansion of the chest were so great as to have absolutely a ludicrous and embarrassing result, for before the fourth month several of the men could not get into their uniforms, jackets and tunics, without assistance, and when they had got them on they could not get them to meet down the middle by a hand's breadth. In a month more they could not get into them at all, and new clothing had to be procured, pending the arrival of which the men had to go to and from the gymnasium in their great coats. One of these men had gained five inches in actual girth of chest.

"Now, who shall tell the value of these five inches of chest—five inches of additional space for the heart and lungs to work in? There is no computing its value, no power of computing it at all; and, before such an addition as this could be made to this part of the body, the whole frame must have received a proportionate gain. For the exercises of the system are addressed to the whole body, and to the whole body equally, and before this addition could be made to the chest every spot and point of the frame that you could touch with the tip of your finger must be improved also; every organ within the body must be proportionately strengthened.

"But I tried another method of recording the results of the exercises. I had these men photographed naked to the waist shortly after the beginning of the course and again at its close; and the change in all, even these small portraits, is very distinct, and most notably so in the youngest, a youth of nineteen, and, as I had anticipated in him, not merely in the acquisition of muscle, but in a readjustment and expansion of the osseous framework upon which the muscles are distributed.

"But there was one change—the greatest of all, and to which all other changes are but means to an end, are but evidences more or less distinct that this end has been accomplished—a change which I could not record, which can never be recorded, but which was to me, and to all who had ever seen the men, most impressively evident—and that was the change in bodily activity, dexterity, presence of mind, and endurance of fatigue; a change, gentlemen, a hundredfold more impressive than anything the tape measure or the weighing chair can ever reveal.

"The results upon the second detachment of instructors whom I am now qualifying are equally satisfactory, but more uniform, the men having been more specially selected.

"Up to this point, gentlemen, I have spoken but of the beneficial results of exercise as affecting the man, without special reference to his professional duties as a soldier; and I have done so purposely, because you will in a moment see that the power of the man and the serviceability of the soldier are inseparable conditions. Our embodied idea of energy, activity, and strength is the soldier, these qualities trained to, made subservient to, the exigencies of his profession; and these qualities are the inevitable results, the incontrovertible results, of that system of bodily training which I advocate, because the system itself is based upon, and all its directions are in accordance with, the natural laws which govern the growth and development of the human body. Endow a man with these qualities, therefore, and you endow him with the power of overcoming all difficulties against which such qualities can be brought to bear, against all difficulties requiring strength, activity, energy, dexterity, presence of mind, tenacity, and endurance. You cannot limit a high qualification to a single use any more than you can limit the purpose to which a good coin may be applied; it will fetch its value anywhere and in anything. And so will strong muscles and sound lungs—in garrison, in camp, or on camping, on the march, in the field, in the transport, in the hospital, on any service, in any climate.

"But, although we cannot limit the use of a qualification, we can very readily give to it a special direction by special care, and make it more distinctly valuable for special purposes. And this is emphatically the case with the application of the powers acquired by gymnastic training to the duties of the professional life of the soldier. Indeed, as will be seen by the published book of the system, this is the ultimate aim and object of every exercise in it, and this is clearly inculcated and steadily kept before the learner throughout his instruction. And the last course in the system consists exclusively of the practical application to a professional use of all that has gone before, teaching the soldiers how to overcome material obstacles of every form, position, and character, surmountable by walk or run or leap or vault or climb, with implements and with arms, singly and self-dependent, or with comrades rendering and receiving mutual assistance.

"Therefore the question which I have advanced, 'Do the exigencies of a soldier's life require or render valuable the possession of great physical resources?' I will not further answer, because the answer is apparent on the face of the question itself, and the question was only put to emphasize the importance of the subject to which it refers. I feel it would be unbecoming in me further to enlarge upon this subject before professional men, acquainted by life experience with all the forms in which the exigencies of the soldier's profession make daily, hourly claim upon his physical resources, and who know that health and strength are the essence of the soldier's power.

"Nor need I repeat here, because they must be familiar to you all, the startling statistics which show the small percentage of men who fall by the weapons of the enemy, in comparison to those who succumb to the demands made upon their bodily energies. For the one enemy in his own form which the soldier has to encounter, there are a hundred lurking around him unseen, in the form of sufferings which originate in the manifold trials of his professional life. He cannot stand the heat, or he cannot stand the cold; he cannot stand the terrible exertion and excitement of the struggle, or he cannot stand the monotony of the camp and wearisomeness of the march; he cannot subsist on the scanty and ill-prepared rations; he cannot bear up against the broken and insufficient rest. Against his single human foe we put into his hands the most perfect weapon invented—I might almost say inventable—by man; against the other foes that lurk in this path, awaiting him at every turn, there is but one protection—to strengthen the soldier himself.

"In conclusion, I would merely remark, that while this is applicable to the soldiers of every country, how much more so—with how much greater force—does it apply to our own, who have to pass from station to station over the whole world, who have to endure the extremes of every climate, from the almost arctic cold of Canada to the tropical heat of Africa and the Indies? If physical energy and constitutional strength be the essence of power in the soldiers of any other nation, they must be so with strange distinctness in those of ours, who have to exercise their profession over almost every country on the face of the globe, and to endure the hardships, the fatigues, the discomforts of them all.

"In this paper I have spoken only of the physical advantages which the soldier would derive from a systematic bodily training, but its value in a moral point of view would be almost as great, as evident, and would be assured by the natural action of laws as plain as those which regulate his material improvement. I do not allude merely to the filling up healthfully, pleasurably, and profitably of his spare time—I do not allude merely to the evidence which it would set before him of how health and strength are gained, and how they are lost, and of the immeasurable advantages which the possessor of these qualities has, in every situation of life, over the man who has them not—I allude to the well-known physiological fact, that active bodily exercise has the direct effect of checking that desire for stimulants and excitements and sensuous indulgences, which sap and undermine the constitution, and wear out the soldier's frame, and which arises, not so much from any physical want, or for the natural gratification of any legitimate physical desire, as from a nervous irritability and craving, that become the stronger the more they are indulged, and the strength and force of which are usually in an inverse ratio to the bodily strength and power of the individual—in an inverse ratio to his ability to indulge in them with impunity."

Obituary.

MORTIMER G. PORTER, M.D.

Dr. Porter was a native of Skaneateles, Onondaga Co., New York. He was the son of Dr. E. H. Porter, and grandson of the late Dr. Daniel Porter, both of that town. He was a graduate of the *Buffalo Medical College* at the session 1849–50. After receiving his medical degree, Dr. Porter became one of the Assistant-Physicians to the State Lunatic Asylum, where he remained several years. On leaving the Asylum he located in New York, and entered upon the practice of his profession. He connected himself with the North-Western Dispensary, then just established, the prosperity of which he labored diligently to promote. Dr. P. was a member of the Academy of Medicine and Pathological Society. He was ardently devoted to his profession, and warmly attached to his patients. He contracted fever in his practice, of which he died at the early age of 37. He left a wife and child. His remains were removed to his native town for interment.

Army Medical Intelligence.

(CIRCULAR No. 25.)

War Department, Adjutant General's Office,
Washington, November 4, 1863.

General Orders, No. 355.—Medical Directors of Armies in the field will forward, direct to the Surgeon-General, at Washington, duplicates of their reports to their several Commanding Generals of the killed and wounded, after every engagement.

By order of the Secretary of War:

(Signed) E. D. Townsend,
Assistant Adjutant General.

Surgeon General's Office,
Washington, Nov. 11, 1863.

To carry out the intentions of the above order, Medical Directors of Armies in the field will detail suitable officers, who will, under their instructions, collate and prepare for transmission to this office all obtainable statistics and data in connexion with past and future operations of those armies, which may be essential or useful in the history of the War. Particular attention is called to the following points:

The morale and sanitary condition of the troops, condition and amount of Medical and Hospital supplies, tents, ambulances, &c.; the points at or near the field where the wounded were attended to; degree of exposure of wounded, to wit: cold or heat; adequacy of supplies of water, food, stimulants, &c.; mode of removal of wounded from the field to field hospitals: to what General Hospitals the wounded were transferred—by what means and where; the character and duration of the action, nature of wounds received, &c. When practicable, separate casualty lists will be made of commissioned officers, non-commissioned officers, and privates.

The attention of Medical Officers is earnestly directed to the importance of this subject; without their co-operation no reliable record can be preserved—the vast experiences of the past will remain with individuals, and be lost to the service and the country.

J. K. Barnes,
Medical Inspector General, Act. Surg. Gen.

ORDERS, CHANGES, &c.

The following assignment of Medical Officers has been made:

Surgeon Charles H. Lauh, U.S.A., now awaiting orders in Washington, D.C., to relieve Surgeon Ebenezer Swift, U.S.A., in his duties as member of the Retiring Board at Wilmington, Delaware, of which Major-General McDowell is President.

Surgeon Swift, when relieved, to proceed without delay to the Department of the South, to relieve Surgeon H. R. Wirtz, U.S.A., as Medical Director of that Department; the latter, on being relieved, to proceed to New York city, and report by letter to the Surgeon General, U.S.A., for assignment to duty.

The Hospital Examining Board, convened by Special Orders, 414, September 15th, 1863, from the War Department, and of which Lieut.-Colonel S. H. Lathrop, Assistant-Inspector General, 22d Army Corps, is President, will proceed without delay to inspect and report upon the United States General Hospitals, at the following cities:—Harrisburg, Pennsylvania; Philadelphia, Pennsylvania; New York city and vicinity; Cincinnati, Ohio, and vicinity; Louisville, Kentucky, and vicinity; St. Louis, Missouri, and vicinity; Chicago, Illinois, and vicinity; Mound City, Illinois; Cairo, Illinois.

They will also inspect and report upon the manner of forwarding convalescents from these Hospitals to their regiments, and present such suggestions as may tend to facilitate their return.

The following officers, having tendered their resignations, have been honorably discharged the service of the United States, on account of physical disability, with condition that they shall receive no final payments until they have satisfied the Pay Department that they are not indebted to the Government.

Surgeon James Norval, 79th New York Vols., to date June 13, 1863.

Assistant-Surgeon Wallace D. Martin, 62d Penns. Vols. (published officially October 19, 1863), having failed to appear before the Military Commission, instituted by Special Orders No. 53, from the War Department within the prescribed time, the President directs that he be dismissed the service of the United States, for desertion, to date September 23, 1863.

The following Medical Inspectors, U.S.A., now on duty with the Armies constituting the Military Division of the Mississippi, will at once report by letter to Major-General Grant at Nashville, Tenn., for assignment to duty:—Lieutenant-Colonel Charles C. Keeney, Lieut.-Col. Edward P. Vollum, Lieut.-Col. George T. Allen, Lieut.-Colonel Lewis Humphreys, Lieut.-Col. John E. Summers.

Leave of absence for fourteen days has been granted Assistant-Surgeon F. Denicke, 30th and 32d New York Independent Batteries.

The following officers will report in person, without delay, to the Commanding-General of the Department of the South, for assignment to duty:—Assist.-Surgeon John F. Huber, U.S.V.; Assist.-Surgeon Henry M. Kirke, U.S.V.; Assist.-Surgeon Charles H. Hood, U.S.V.

The resignation of Surgeon William S. Forbes, U.S.V., has been accepted by the President, to take effect November 20, 1863.

Assistant-Surgeon A. M. Sigmund, U.S.V., recently appointed, will report in person, without delay, to the Commanding Officer of Camp Douglas, Illinois, for duty.

Assistant-Surgeon Ira Brown, 65th Illinois, will proceed without delay to join his regiment.

Assistant-Surgeon Milton J. Bowland, supernumerary officer of the 71st Ohio Volunteers, has been honorably mustered out of service.

Stillman Witt of Cleveland, Ohio, is hereby appointed a Special Inspector, to visit the hospitals at Port Royal and Hilton Head, and will report to the War Department. The Assistant-Quartermaster at New York will furnish Mr. Witt, his wife and daughter, with transportation on a Government transport to and from Hilton Head.

So much of Special Orders No. 417, current series, from the War Department, as relates to Assistant-Surgeon W. F. Fundenberg, 176th Pennsylvania drafted Militia, has been rescinded, and Surgeon Fundenberg is hereby mustered out, and honorably discharged the service of the United States, as of the date his regiment was mustered out.

Original Lectures.

LECTURES ON
THE MORBID CONDITIONS OF THE BLOOD.

DELIVERED AT
THE BELLEVUE HOSPITAL MEDICAL COLLEGE.
PRELIMINARY TERM, SESSION OF 1863–4.

By AUSTIN FLINT, M.D.,
PROF. OF THE PRINCIPLES AND PRACTICE OF MEDICINE.

LECTURE VII.

Matter of Contagion.—Viruses.—Venoms.—Infectious Miasms.—Poisons, Palpable and Impalpable.—Zymotic Conditions.—Considerations which lead to the Inference of the Prior Existence of a Constitutional or General Morbid Condition, or Indeterminate Blood-Changes in various Local Affections.

Of morbid conditions of the blood induced by morbid products originating within the bodies of the persons affected, that is, intrinsic products, there are doubtless many in addition to those which have been noticed. We do not possess demonstrative or even inferential knowledge of the different kinds of these morbid products existing in the blood, the sources whence they are derived, the manner of production, etc. We only know by means of clinical observation some of the circumstances under which they originate, and the phenomena to which they give rise. These belong to what may be called the indeterminate morbid conditions of the blood. Deferring for the present the consideration of these, the morbid conditions of the blood induced by morbid products derived from other bodies, and those induced by extrinsic matters other than morbid products, claim attention. Morbific substances, of various kinds, developed exterior to the body, *i. e.* extrinsic, may gain access to the blood and give rise to disease, either directly by their immediate action on one or more parts to which they are transported in the blood, or, indirectly, by occasioning morbid changes in the blood itself.

In this category are embraced morbid matters which constitute contagion. A material substance is, of course, transported from one person to another whenever a disease is communicated. An appreciable substance is conveyed when diseases are produced by inoculation, but the quantity is impalpable and inappreciable when they are involuntarily or imperceptibly communicated. In the latter case the matter is probably received with the inspired atmosphere. The matter of contagion is distinguished as *virus.* It is convenient to limit the application of this term to matter which is palpable or appreciable. When the material substance consists of emanations which are not apparent to the senses it belongs among the morbific matters distinguished as *miasms.* The terms contagion and infection have been used with not a little confusion as regards the relative signification of each. It would be convenient to restrict the term contagion to a palpable morbid product or virus, and the term infection to an impalpable emanation or miasm. With this use of the term some diseases are contagious and not infectious, for example syphilis; some are both contagious and infectious, for example small-pox; and some are infectious but not contagious, for example pertussis or hooping-cough.

Each contagious or infectious disease has its own peculiar and specific morbid product. The virus of small-pox, the miasm of scarlatina, for example, produce respectively these two diseases and no other forms of disease. And in this fact we have a grand criterion of the special character of a disease, and of determining the identity or non-identity of diseases which may have more or less phenomena in common. Typhus and typhoid fever, for instance, are considered by some identical and by others non-identical. Now if it be conclusively shown that the infectious miasm of typhus gives rise always to this form of disease and never to typhoid fever, and, conversely, that the infectious miasm of typhoid fever gives rise to this disease and never to typhus, we have the best evidence that they are not one disease but two distinct diseases.

Of the nature of the virus of contagion or the miasm of infection, in other words, in what consists the faculty of producing a particular form of disease, and of giving rise to actions by which it is reproduced, we have no positive knowledge. The hypothesis now generally entertained, and most consistent with our present knowledge, is, that the matter of contagion and infection, received into the blood, acts as a ferment, exciting in the blood certain processes on the principle of catalysis. The grounds for this hypothesis are the minute amount of matter required, and the occurrence of an interval of days or weeks between its introduction into the system and the development of morbid phenomena. Diseases supposed to be thus produced are distinguished as *zymotic*, a term introduced by the Registrar-General of Great Britain, Mr. Farr. All diseases communicable by contagion or infection are considered as zymotic, and also, as will be seen presently, certain diseases which are not communicable.

An extrinsic morbid product, giving rise to a morbid condition of the blood, may come from an inferior animal. Hydrophobia is thus derived from the dog or cat, and glanders from the horse. Disease in man may also be produced by the introduction into the blood of a healthy product derived from an inferior animal. Such a product is not a virus but a venom. Venomous animals are those which produce, physiologically, a product which, received into the system of man, or another animal, gives rise to disease.

Morbific substances, not of the nature of virus nor of venom, are, strictly speaking, poisonous. These are derived from the mineral and vegetable kingdoms. Their morbid effects are, in general, proportionate to the quantity of poison received into the system. Here is a striking point of difference as contrasted with viruses and venoms. The morbid effects of the latter bear little or no proportion to the amount received. The effects of some poisons are cumulative; that is, they are manifested suddenly, as it were by a kind of explosion after the quantity has increased to a certain amount. Lead, for example, may be taken into the system for a long period without any manifestation of morbid effects; but, at length, when the accumulation has reached a certain point, its poisonous results are suddenly declared.

Extrinsic poisons are palpable and impalpable. Palpable poisons admit of examination, and their source and nature are understood, but not always their mode of operation. Impalpable poisons belong among the miasms. The physical and chemical characters of these have not been ascertained, and their sources are not always known.

The palpable poisons are numerous. Their study constitutes an important branch of scientific inquiry called *toxicology.* Examples of the palpable poisons are arsenic, lead, mercury, prussic acid, etc., etc. It is now generally admitted that they act by getting into the blood, not by means of sympathetic influences propagated from the part with which they first come into contact as was formerly supposed. They offer marked differences as regards the gravity of their effects. Some are quickly fatal in a small quantity, as prussic acid, strychnia, aconite, etc. Others act more slowly and with less virulence, as mercury, lead, etc.

The effects of extrinsic poisons are manifested in different parts of the body. Certain poisons exert effects on particular parts. Thus, alcohol and opium exert their effects on the brain; arsenic and oxalic acid on the heart; strychnia, woorara, and conia on the spinal cord; mercury on the mouth; lead on the muscles, etc. Many, however, act simultaneously on a greater or less number of parts. As regards their effects on the blood, some are merely mixed or in solution, and act directly on parts to which they are carried in the circulation. Oxalic acid, arsenic, mercury, lead, prussic acid, alcohol, etc., have been discovered in the blood. In other instances chemical combinations take place in the blood. A striking illustration of this is offered by one of the experiments of Bernard. Emulsine and amygdaline are not poisonous separately, but they combine and form prussic acid. Injected separately into the veins in different animals they do no harm. If, however, they are successively injected into the veins of the same animal they combine in the blood to form prussic acid, and the animal dies as if struck by lightning. On the other hand, the blood presents certain combinations which take place readily out of the body. An experiment of Bernard illustrates this fact. Cyanuret of potassium and lactate of iron in combination form prussian blue. Injected successively into the veins they do not combine in the blood, but the combination takes place and prussian blue is formed after both have entered the urine or within the intestinal canal.

Examples of impalpable poisons are the miasms giving rise to the periodical fevers, epidemic cholera, cholera infantum, epidemic dysentery, yellow fever, etc. All the extrinsic causes of disease which are special in their character, and not of the nature of virus or venom, belong among the miasms. By the term special is meant causes each of which produces exclusively a particular disease. Now the existence of a special cause, as just defined, may be inferred from the special character of a disease. Whenever, therefore, the special character of a disease is established we may attribute it to a toxical origin. All endemic and epidemic diseases have a special character; in other words, the events which make up the clinical history of each are so definite and are regulated by such fixed laws that they undoubtedly proceed from special causes, which it is certain are produced, not within but without the body. These special causes are not of the nature of virus or venom; they are impalpable or miasms. But their nature and source are very imperfectly known, nor does our present knowledge enable us to understand the morbid conditions of the blood which they occasion. Of course these morbid conditions and the special causes differ in the instance of each epidemic or endemic disease. The condition of the cause in yellow fever, for example, cannot be the same as in epidemic cholera, in view of the differences as regards the phenomena of laws between these two diseases. The position of existing knowledge is the same with respect to poisonous as to infectious miasms. The most rational proposition as regards both is, that they give rise to the morbid conditions of the blood by a catalytic action. But there is this striking point of contrast between the operation of poisoning miasms and the matter of contagion and infection:—Poisonous miasms do not lead to a reproduction by the processes of disease, of the poison, and, hence, the diseases to which they give rise are not communicable.

With the foregoing view, diseases due to poisonous miasms belong among those which are distinguished as zymotic. Thus the class of zymotic diseases embraces all which are contagious or infectious, endemic and epidemic.

The morbid conditions of the blood, so far as they are at present known to the pathologist, have now been passed in review. It is evident that our existing knowledge is very incomplete. Were all the morbid conditions of the blood fully understood there is reason to believe that we should have the thread guiding us through the labyrinth of pathology. This knowledge would probably elucidate the greater part of the morbid conditions of the solid structures. The most rational view of the source of disorders referable to the circulation, the various secretions and excretions, nutrition, together with morbid states of the muscular and nervous systems, is, that they proceed often if not generally from blood-changes. The blood offers at the present moment a most interesting and promising field for the scientific inquirer. It is here that important discoveries are to be made which will shed light on the nature and source of diseases now imperfectly understood. In view of the physiological relations of the blood, and what has been already ascertained respecting its pathological relations, it is safe to prophesy that future revelations in pathology are mainly to come from analytical and experimental researches in this direction.

The remark has been already made that the existence of numerous morbid conditions of the blood may be logically inferred, although, with our present knowledge, they cannot be demonstrated. In other words, there are many *indeterminate blood-changes* involved in different diseases. What are the considerations which warrant this conclusion? I shall devote the remainder of this lecture to the answer to this question.

It is a reasonable supposition that all the diseases distinguished as *general*, or *constitutional*, or *of uncertain seat*, involve blood-changes. In fever, generally, if not always, these changes are occasioned by extrinsic morbific matter, either a virus, a miasm, or a poison. But many other diseases evidently involve a general or constitutional pathological condition called a cachexia or a dyscrasia. Now it is more rational to refer this condition to the blood than to any other portion of the body. Exclusive of the blood, there is only one anatomical system sufficiently extensive in its relations to warrant a suspicion of its being the seat of the essential pathological condition in general or constitutional affections; this is the nervous system. But the nervous system, as a generator of force, depends on the blood. Without blood it develops nothing, and its functions are soon lost. Morbid conditions of the blood, voluntarily produced, affect powerfully the nervous system. For example, alcohol injected into the veins produces the phenomena of inebriation, chloroform and ether extinguish sensation, strychnia excites the motor fibres of the spinal cord, woorara paralyses them, etc. These substances exert their effects either by being transported into the blood and acting upon the organs affected, or by means of modifications which they produce in the blood. Clinical observation, moreover, shows that a large proportion of nervous affections is due to prior blood-changes. As between the blood and nervous system, therefore, the essential pathological conditions which constitute the cachexiæ or dyscrasiæ must relate to the former.

Assuming the correctness of the statement just made, it is enough, with regard to any local affection, to show that it is dependent on a general or constitutional morbid condition; in other words, that it involves a cachexia or dyscrasia, to render it probable that it proceeds from a blood-change of some kind. It only remains then to inquire what circumstances authorize the inference that a local affection depends on a general or constitutional condition. The following are grounds for such an inference:—

1. A local affection not due to the action of an appreciable cause, acting on the part affected, is said to be spontaneous. Of course it is not so called with strict propriety. Every affection must have an adequate determining cause. The distinction implied by the term is, that the cause is internal and inappreciable, and the term is used in contradistinction from causes called traumatic. Now the internal determining causes involved in the production of the so-called spontaneous diseases, it is not probable, are exclusively local; they are not generated within the part affected, but, originating within the system somewhere, are brought to bear upon the organs or structures in some particular situation. For example, a person exposed to no obvious cause of disease is attacked with pleurisy; whence comes the internal cause determining this disease? It is reasonable to conclude that the disease is a local expression of some prior, more general morbid condition. Clinical researches have shown this to be true in certain cases in which pleurisy, occurring in the course of Bright's disease, is fairly attributable to the accumulation of urea in the blood. The so-called spontaneity of any disease is presumptive evidence of its being a result of a localization of a morbid condition seated in a movable element of the body, that is the blood. Going no further than the simple fact of a local affection developed without any appreciable local cause, the existence of a blood-change is a logical inference from this fact.

That most local affections distinguished as spontaneous do proceed from some general or constitutional morbid condition, is rendered probable in addition to the consideration just presented, by others which are to follow.

2. Local affections characterized by morbid deposits are, from this fact, rationally attributable to a morbid condition of the blood. The production, for example, of a purulent matter in great abundance, having the property of a virus, in small-pox, or the exudation into the peyerian, solitary, and mesenteric glands in typhoid fever, denote a blood-change proper to each of these diseases. In like manner all the cutaneous eruptions involving morbid products, especially when not due to obvious local causes, in other words, when spontaneous, imply blood-changes. The old medical philosophers, guided by common sense, before the discovery of the circulation, attributed most diseases to the presence of certain *peccant humors* which were to be concocted and expelled before recovery could take place. They regarded the local and general phenomena of diseases as proceeding from the effects of nature at coction and elimination. Morbid processes, therefore, were, in a great measure, conservative. These notions gave way under the influence of an exclusive solidism developed and fostered by the study of morbid anatomy, which is occupied, not with morbid actions but their results; disease itself was overlooked, the attention being engrossed with its effects. But in the ancient common-sense notions lies the germ of a true pathology, as modern researches are constantly exemplifying more and more. With our present knowledge the old humoral doctrine is, in the main, applicable to the diseases which have been named; and its application may be extended to other diseases characterized by morbid deposits, such as gout, tuberculosis, carcinoma, and perhaps even to certain inflammations attended by the exudation of lymph.

3. Disorders of the different secretions and excretions denote blood-changes. This is true, more especially, of excretions, inasmuch as excreted matters exist preformed in the blood, and are simply eliminated by the excretory organs.

4. The fact of local affections occurring simultaneously or in quick succession in different situations, is evidence of a general or constitutional morbid condition. Examples are, purulent formations in pyæmia, tubercle deposited in various organs, cancer, etc. Shifting of the location of the local manifestations of disease, as in acute articular rheumatism, is another point of evidence.

5. The occurrence of a local affection on the two lateral sides of the body, and a correspondence of the affection of the two sides as regards the character of the affection, its situation, extent, etc., constitutes a very strong point in evidence of a constitutional morbid condition involving a blood-change. A striking law of symmetry characterizes certain diseases. They may be distinguished as symmetrical diseases. Examples are various cutaneous diseases, articular rheumatism, Bright's disease of the kidneys, pulmonary tuberculosis, etc. We cannot well conceive that the internal determining conditions which give rise to the local manifestations in these diseases are seated elsewhere than in the blood. We may assume it to be a rational conclusion that the essential pathology of all symmetrical diseases pertains to the blood; and the fact that the law of symmetry is exemplified in any disease, suffices to render it probable that it is a blood disease.

6. The *modus operandi*, so far as known, of remedies found to be useful in the treatment of a great number of local affections, shows their source to be in the blood. The remedies referred to are those which act by being absorbed into and modifying the blood. These remedies have been significantly termed *alteratives*. Their immediate effects in the blood are unknown; we can only say that they alter in some way and affect favorably the condition of the blood. Examples are mercury and iodine.

The foregoing are some of the considerations which establish, by logical inference, the general or constitutional origin of local affections, the nature of the general or constitutional morbid condition being unknown, but consisting, as is rationally probable, in indeterminate pathological changes in the blood. Other considerations which might be adduced are omitted, the aim being, not to enter into a discussion of this topic, but only to present suggestions for your own inquiries and reflections.

Original Communications.

THE INFANTILE PULSE IN HEALTH.

By J. LEWIS SMITH, M.D,

PHYSICIAN TO THE ORPHANS' HOME AND ASYLUM.

Among physicians, the world over, the pulse is considered an important aid in determining not only the nature, but also the gravity of diseases. Where the science of medicine is most advanced, and the signs and symptoms of the various pathological states are best understood, it does not have that preëminence as a means of diagnosis, which is accorded to it in less enlightened countries; still there are few physicians, however extensive their medical knowledge, who do not carefully note its frequency and force in all cases of serious sickness.

Since the pulse is considered so important a symptom, and is one so readily observed, it is strange that its character in the healthy infant is not more accurately known. It is true, that some eminent European observers, as Trousseau and Valleix, have published statistics of the infantile pulse in a state of health, but there is such a disagreement of these statistics that it is uncertain which of them or whether any of them affords a correct standard for comparison. Some are unreliable, from the small number of observations; some from the fact that the pulse of the infant is grouped with that of older children; and others because the condition of the infant, as regards its activity or its emotions, is not stated. This last is a serious defect, since the pulse of the infant is in a marked degree accelerated by its movements and passions. My own observations have been arranged in three groups, according to whether, first, the infant were asleep; secondly, awake, but quiet, or exercising slightly, as in nursing; or lastly, in a state of active exercise, or of great excitement, as in crying. It is evident that the separation of the third from the second group is arbitrary, but statistics of this sort do not seem to admit of a better division.

It is evidently desirable to possess a correct standard with which to compare the pulse of the infant, especially in the treatment of obscure diseases; and the idea of making these observations first occurred to me in attending a case of suspected meningitis, in which the diagnosis depended, in a measure, on ascertaining whether the pulse was accelerated.

It is not easy to collect statistics of the healthy infantile pulse which are free from error, since there are often slight derangements of the system in infancy, not manifested by any marked symptoms, but which produce acceleration of the pulse. Among these derangements may be mentioned mild catarrhal and bronchial affections, and disturbances of the digestive function. It is believed that the following statistics are as free as possible from error from this source. These statistics relate to infants under the age of one year.

PULSE OF THE NEW-BORN.

At birth the action of the heart is temporarily arrested. There is a momentary stasis of blood at the centre of circulation, while the direction of the current is being changed. In cases which I have examined in reference to this matter, there has been suspension of the movements of the heart during the interval between the expulsion of the head and body of the infant, and there is usually a period of suspended action after the body is expelled. In a large majority of cases the pulsations begin in about one-eighth of a minute after birth, and at first they are so slow, that by the close of the first quarter of a minute the number of beats does not usually exceed eight or ten. In exceptional cases the movements of the heart commence almost immediately after birth, and then the number in the first quarter of a minute considerably exceeds that mentioned. By the second quarter of a minute the cries are vigorous, and the pulse now is rapidly accelerated, rising commonly above 120, and sometimes above 160 beats per minute. In twelve observations the average pulse in the second quarter of a minute after birth was found to be at the rate of 136 per minute. This rapid action of the heart continues till the crying ceases, and the infant becomes quiet, when the pulse diminishes. In infants feeble at birth, and especially in those who have more or less congestion of the brain, the result of tedious or unnatural labor, this statement does not hold true. In these cases it is often many minutes before the pulse returns, and it does not rise to the normal frequency till the congestion is relieved. In cases terminating fatally, from the persistence of the congestion, or from the occurrence of meningeal apoplexy, the pulse rarely rises above, or, at least, remains above 100 per minute, and before death it falls below the frequency of the normal adult pulse.

The following table contains 57 observations of the pulse in healthy infants during the first half hour of life:—

2d quarter of first minute, pulse at rate of 162, 128, 164, 140, 152, 156, 96, 128, 124, 116, 156, 116,		124 to 130	96 to 100	118 to 124
3d quarter of first minute, pulse at rate of 148, 160, 156, 160, 160, 156, 144, 134,	124 to 130			
4th quarter of first minute, pulse at rate of 108, 172, 140, 156, 164, 134,				

2d minute pulse, 164, 104, 112. 160, 162 to 164. 140, 108, 122, 120.
3d to 10th minute inclusive, 160, 140, 162 to 164, 148, 160 to 164, 132, 124, 148, 140, 160, 124.
10th to 30th minute, 156, 100, 132, 136, 124, 148, 118.

In the following table are 42 observations of the pulse during the first week of life, and subsequently to the first six hours:—

Asleep.	*Awake (Quiet, moving slightly, nursing).*	*During or after active movements, or strong mental excitement.*
140	118	140
136	114	160
114	128	140
128	136	152
116	118	Extremes 140 and 160
112	128	Mean . . 149
124	152	
136	112	
108	126	
120	136	
136	106	
124	132	
120	132	
108	104	
108	140	
112	128	
Extremes 108 and 140	140	
Mean . 122	132	
	118	
	126	
	116	
	128	
	Extremes 104 and 152	
	Mean . 126	

"M. Lediberder," says Bouchut, "could only count the pulse in the first minute of life in six children, and he has observed from 72 to 94 pulsations." Valleix estimates the pulse between the ages of two and twenty-one days, at 87. Trousseau states that the pulse in the first week of life varies from 78 to 150: and Dr. Gorham's observations are somewhat similar to Trousseau's. My observations, as seen from the above tables, do not correspond with the assertions of Lediberder and Valleix. Indeed, if there were no conflicting testimony, there would still be a strong presumption that these authors are in error, for we would not expect that the pulse of the infant, in whom there is greater activity both muscular and visceral, would fall so much below that of the fœtus. It is probable from the expression "could only count the pulse * * in six children," that Lediberder, and perhaps Valleix, counted the pulse at the wrist, which with exceptional cases is very difficult, and is frequently impossible in the first week of life, and that they missed some of the beats, or not unlikely sometimes counted their own pulse. Immediately after birth, there is so little force of the ventricular systole, and the extreme arteries of the system therefore pulsate so freely, that neither in the limbs nor at the anterior fontanelle can the pulse be properly enumerated in the majority of infants. It can be readily and accurately ascertained only by auscultation, or by placing the hand on the precordial region, or more easily directly after birth by the pulsation in the cord. The pulse occasionally ceases in the cord almost immediately after birth, but ordinarily it is present for a quarter and sometimes for half-an-hour.

From the close of the first week till the close of the first month:

Asleep.	*Awake (quiet, moving slightly, nursing).*	*During or after active movements, or strong mental excitement.*
128	140	162
124	132	156
112	136	140
128	132	152
144	148	Extremes 146 and 162
112	160	Mean 152½
112	140	
104	140	
112	124	
104	140	
Extremes 104 and 144	Extremes 124 and 160	
Mean 118	Mean 139	

From the close of the first month till the close of the third month:

Asleep.	*Awake (quiet, moving slightly, nursing).*	*During or after active movements, or strong mental excitement.*
124	144	176
120	136	152
124	124	158
120	144	144
104	112	152
116	142	180
120	132	Extremes 144 and 176
126	112	Mean 160
132	148	
122	124	
124	128	
104	132	
124	144	
104	124	
108	124	
124		
116		
Extremes 104 and 132	Extremes 112 and 148	
Mean 118	Mean 131.75	

From the close of the third month till the close of the sixth month:

Asleep.	*Awake (quiet, moving slightly, nursing.)*	*During or after active movements, or strong mental excitement.*
104	132	132
112	120	148
104	130	148
104	140	144
116	132	156
124	182	156
Extremes 104 and 116	128	Extremes 132 and 156
Mean 108	124	Mean 147
	136	
	124	
	124	
	144	
	136	
	116	
	116	
	120	
	132	
	182	
	120	
	112	
	128	
	136	
	124	
	146	
	140	
	Extremes 112 and 146	
	Mean 129	

From the close of the sixth month till the close of the first year:

	Asleep.	*Awake (quiet, moving slightly, nursing).*	*During or after active movements, or strong mental excitement.*
	104	132	182
	104	120	144
	118	130	152
		140	152
Mean	109	132	198
		132	160
		128	
		124	Extremes 132 and 193
		136	Mean 156
		132	
		120	
		112	
		124	
		124	
		144	
		136	
		116	
		116	
		120	
		132	
		Extremes 112 and 144 Mean 127·4	

The average pulse of the healthy infant, according to Trousseau, is 137 in the first and second months, 128 from the third to the sixth month, and 120 from the sixth to the twelfth month. It is seen that his observations agree closely with mine in the second group, and it is probable that he selected only those cases for his statistics in which the infants were awake but quiet. The pulse does not vary greatly in the different months of the first year.

The above statistics show a marked diminution of the pulse, in sleep, except in the first week of life. If we take the pulse of the infant when awake, but quiet, as the standard, there is an average reduction of twenty-one beats per minute from the close of the first week till the close of the first month, thirteen and three-fourths from the close of the first till the close of the third month, twenty-one from the close of the third month till the close of the sixth, and eighteen and two-fifths in the last half of the year. These statistics also show that by the emotions and by active exercise, the pulse may become as rapid as in the gravest diseases. The practitioner should be aware of this, for if not he may often form a wrong idea of the gravity of the disease which he is treating. There is greater acceleration of pulse from the emotions and from movements in feeble than in robust children. The influence of digestion on the pulse of the infant, under the age of one year, cannot be readily ascertained, since, from the frequency of nursing, there is scarcely a moment, during the day, when this function is not actively performed.

FOUR CASES OF ASTIGMATISM.

By HASKET DERBY, M.D., Boston.

SURGEON TO THE MASS. CHARITABLE EYE AND EAR INFIRMARY.

The recent valuable paper by Dr. Bumstead, published in this journal, renders it unnecessary for me to go into particulars concerning the nature of the affection known at present under the name of Astigmatism. So few have been the cases of this not uncommon affection reported in this country since the publication of the work of Donders, that a few additional notes on the subject may not be devoid of interest.

A single preliminary word as to the method of expressing the amount of vision possessed by a given patient, and the nature of the sight test alluded to by Dr. Bumstead as "Dyer's Letters."

"Printed letters of a square form, the separate strokes of which have a thickness equal to one-fifth of their height, are in general visible to the normal eye under an angle of five minutes," says Snellen, in the preface to his recently published test letters. On a placard are printed separate lines of isolated letters; the letters in each line of equal size, and severally formed after the above plan. To each line are attached figures, giving the number of feet in which the letters of that line are visible to the normal eye, under an angle of five minutes.* The amount of vision (V) in a given case is expressed by a fraction, the denominator of which is the distance (D) in which a given line of letters *should* be seen, the numerator the distance (d) in which they *are* actually seen.

Thus we have $V = \frac{d}{D}$.

A normal eye distinguishes 20 in 20 feet, then—

$V = \frac{20}{20} = 1$ the normal standard.

If 20 is seen only in 10 feet, then—

$V = \frac{10}{20} = \frac{1}{2}$.

If 100 is seen only in 5 feet, then

$V = \frac{5}{100} = \frac{1}{20}$.

An exceedingly convenient method is thus afforded of expressing the amount of vision actually present, as well as of testing the correctness of the answers, by comparing one with another. Thus, if 40 be seen in 20 feet, 30 must be seen in 15 feet, etc.

Now Donders makes us, at the outset, mindful of two things:—First, that in the abnormally astigmatic eye it is very seldom that $V = 1$. It is not uncommon to find $V = \frac{1}{2}$. Secondly, that a series of lenses of unequal strength seem to leave much the same impression on the eye. It is difficult to elicit an expression of preference, $\frac{1}{6}$ and $\frac{1}{8}$ † are found equally good. Where the vision is rendered less acute from other causes, the change in strength of the glass produces a much greater effect.

Case 1.—Rev. Mr. J., aged 27, came to me March 12th, 1862. He complained of being unable to see any object with as much distinctness as other people. He had always considered himself near-sighted, and I found in fact that concave glasses improved his vision. With the naked eye he made out 100 in 20 feet; with $-\frac{1}{16}$, No. 50, in the same distance, though he noticed very little difference between any of the glasses, from $-\frac{1}{10}$ to $-\frac{1}{20}$. I accordingly ordered him $-\frac{1}{16}$. Nov. 3d he came back and informed me that, though with the glasses his sight was "changed," he was unable to say it was improved. Some objects he saw better, some worse than before. The idea of astigmatism occurred to me. I requested him to examine the relative distinctness of vertical and horizontal lines at the distance of 10 feet, those numbered 70 in Snellen's test being selected. It was found that with the naked eye he saw the horizontal sharply defined, while the vertical were blurred and confused; with his concave glass the reverse was the case. A methodical examination with the stenopaic apparatus now gave the following results:—*Right eye.* With the narrow slit held vertically, No. 30 is seen in 20 feet, all indistinctness vanishes. With the same slit held horizontally, no letter on the placard can be made out, but on adding $-\frac{1}{14}$, No. 30 is again recognised. *Left eye.*—With the slit in the vertical position, *convex* $\frac{1}{40}$, in the horizontal *concave* $\frac{1}{16}$ must be added, in order to make the vision in each of these meridians equal to that of the other eye.

The right eye is therefore the seat of simple myopic astigmatism, with myopia in the horizontal meridian: the left is an instance of compound astigmatism, being hypermetropic in the vertical, myopic in the horizontal meridian, the myopia preponderating. For the right eye a simple cylindrical glass $-\frac{1}{14}$, is required; the axis of course being placed vertically; for the left a bicylindrical glass, the one surface convex $\frac{1}{40}$, the other $\frac{1}{16}$; the axes of the cylinders being at right angles to each other. Such glasses were ground and furnished the patient, whose delight at seeing clearly and distinctly for the first time in his life, was almost unbounded. Practically the vision was brought from $\frac{1}{5}$ up to $\frac{2}{3}$, by neutralizing the astigmatism.

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* A system of letters constructed on this principle was worked out and published by my friend Dr. Dyer, of Philadelphia, before the appearance of Snellen's test in print, though of course some time after Snellen's plan had been brought before the Ophthalmological Congress at Heidelberg.

† For the sake of brevity we adopt the usual fractional method of expressing the strength of a glass. It is perhaps hardly necessary to say that the denominator of the fraction indicates the focal distance of the lens, the distance in which it would unite parallel rays incident upon it. Thus $\frac{1}{8}$ expresses a convex lens of 8-inch focus, $-\frac{1}{8}$ a concave of 8-inch virtual focus.

Case 2.—Mrs. A., aged 28, has always had extremely imperfect vision. Concave glasses assist her somewhat, but she has never found a glass that would enable her to recognise people across the street. March 31st of the present year I made an examination, and found that with the naked eye she made out No. 100, with $-\frac{1}{16}$, No. 80 in 20 feet. Struck by an amount of amblyopia, so great in comparison with the degree of myopia, I examined with the stenopaic slit, and found the right eye to be myopic $\frac{1}{20}$ in the vertical, $\frac{1}{50}$ in the horizontal meridian. The left was myopic $\frac{1}{18}$ in the vertical meridian, normal in the horizontal. With the astigmatism corrected, the vision of each eye became nearly $\frac{1}{2}$. The right eye was ordered a glass, the one surface spherical $-\frac{1}{50}$, the other cylindrical, $-\frac{1}{30}$. The left eye received a simple cylindrical glass $-\frac{1}{18}$. The axes of the cylinders were of course horizontal. With this combination the vision was about doubled, and the patient at once infinitely relieved.

Cases like this, of compound myopic astigmatism, where a different degree of myopia exists in each meridian, are exceedingly rare. Donders has observed but four instances. We are also here reminded of two facts on which the Utrecht professor lays much stress. First, that the correction of astigmatism by cylindrical glasses is often only partial. Secondly, that the meridians of greatest and least curvature do not by any means necessarily correspond with the vertical and horizontal meridians of the cornea itself. In the present instance there was a wide discrepancy.

Case 3.—Miss F., aged 21, has always considered herself quite near-sighted, but never found glasses help her. Is strongly convinced that the difficulty is on the increase. The cornea of each eye is found to be decidedly conical, particularly that of the left. No glass enables her with either eye to distinguish a single letter of the test in 20 feet, not even No. 200. It is a source of regret to me that I did not estimate the precise amount of vision; it was, at all events, as the above statement shows, less than $\frac{1}{10}$. As the patient was quite unwilling to submit to an iridesis I bethought me of ascertaining whether the cornea, in yielding, had done so equally in all its meridians. March 25th, an examination was made with the stenopaic slit, the results being as follows:—*Right eye*, in the horizontal meridian, myopia $\frac{1}{7}$, vision $\frac{2}{5}$; in the vertical myopia $\frac{1}{36}$, vision $\frac{2}{5}$. *Left eye*, in the horizontal meridian, myopia $\frac{1}{7}$, vision $\frac{1}{5}$. In the vertical no combination helps. I ordered for the right eye a lens, the one surface of which was ground $-\frac{1}{36}$ on a spherical, the other $-\frac{1}{9}$ on a cylindrical surface. For the left a simple cylindrical glass $-\frac{1}{7}$. With this combination her vision is more than quadrupled. From not seeing 200 in 20 feet, she now reads 50 in the same distance. Of course this is only a temporary advantage, and would never be urged as preferable to operative interference in cases of keratoconus, except we were well assured that the process were stationary, and the conicity not excessive. Even then we should be chiefly influenced by cosmetic considerations.

Case 4.—Simple hypermetropic astigmatism. Miss A., aged 18, has never seen any distant object distinctly, and never been able to employ herself on a near object for any length of time without the usual symptoms of asthenopia, such as blur, pain over eyes, and headache. There was no insufficiency of the internal recti, and convex glasses did not improve vision, which amounted to only $\frac{2}{7}$. I examined the cornea in its different meridians, and found in the right eye, in the vertical meridian, vision $\frac{2}{7}$, no glass improves. In the horizontal there was hypermetropia $\frac{1}{14}$, vision $\frac{1}{2}$. Left eye: in the vertical meridian vision $\frac{1}{3}$, no glass helps; in the horizontal hypermetropia $\frac{1}{16}$, vision $\frac{1}{3}$. I ordered for the right eye $\frac{1}{14}$ cylindrical, for the left $\frac{1}{16}$ cylindrical; the axes of the cylinders to be vertical. Vision was then increased from $\frac{2}{7}$ to $\frac{1}{2}$, and the patient enabled to use her eyes for reading, writing, and the like, as long as she wishes.

The account of these cases thus given is necessarily as imperfect as it is brief; nothing like a strict analysis being here attempted. The latter would of course contain accurate measurements of the cornea itself.

N.B. The glasses above ordered were ground by Paetz and Flohr, of Berlin, who promptly responded to my orders. It is hardly necessary, of course, to allude to the importance of their being set in the frame at exactly the proper angle. The remarks of Donders in this connexion are so practical that I translate them entire:—

"In using cylindrical glasses it is of the first importance that the axes of curvature of the surfaces correspond with the principal meridians of the dioptric apparatus of the eye. A trivial departure from this gives rise to considerable trouble, especially when the stronger glasses are used. We can best accomplish this by inserting the glasses, which should be round, in a spectacle frame provided with round eyes. By revolving the glasses the axes of the cylindrical surface may thus easily be brought into the desired position. By slightly moving the whole frame we quickly learn in which direction the glass has got to be revolved, and the test that it has obtained exactly the proper position is that, if the frame be slightly tilted to the one side or the other, the correction becomes less complete, the vision less perfect. If the correct position for round glasses be once found, they can be cut into an oval shape, and set in another frame, the direction of the axes being preserved. From what has been said it is easy to infer that a well fitting frame, and one that keeps well in place, is an indispensable adjunct."

Reports of Hospitals.

CHURCH U.S.A. GENERAL HOSPITAL, MEMPHIS, TENN.

C. H. CLEVELAND, ACT. ASST. SURGEON U.S.A., IN CHARGE.

REPORT OF FIVE CASES OF HOSPITAL GANGRENE,

BY D. C. LLOYD, MEDICAL CADET, U.S.A.

(*Concluded from page* 268.)

CASE IV.—Thomas P. Riggs, private, Comp. J, Hawthorn's Arkansas (Confederate) Infantry, was wounded at Helena, July 4th, 1863, by a ball entering the inner surface of the middle third of the right leg, passing through the gastrocnemius muscle, and emerging at the opposite point in the outer side. Admitted to Church Hospital, from the Overton Hospital, July 31st, 1863. Patient says he was doing well until the 15th of July, when gangrene appeared on his wound. Yeast and charcoal poultices, and nitric acid had been applied to the gangrene without arresting its progress. His appetite has been poor, but is now improving. The wound presents a surface of six inches longitudinally, by four transversely, extending to the posterior aspect of the leg: the upper margin being within three inches of the popliteal space. Slight hæmorrhage occurred from one of the branches of the popliteal artery, which was arrested by the persulphate of iron. His tongue is clean and moist, pulse 75, full and regular; complexion sallow; skin moist; bowels regular. Ordered quinine and iron. August 12th.—Patient seems better, he is lively, says he had profuse perspiration about three o'clock this morning. Pulse 100, full; tongue clean and moist; temperature 96°; appetite poor, wound unimproved, attended with slight fœtor, and a sharp pain upon moving his limb. His bowels are regular, and he sleeps well in the fore part of the night. Labarraque's solution was applied with oakum to the wound. August 16th.—The sloughs readily came off this morning, leaving a fine healthy looking surface, attended with no fœtor. The patient has diarrhœa; his tongue is moist and clean; appetite improved; temperature 94°; pulse 94, full. To take the following: R. Hope's mixt. ʒ ij., a tablespoonful every three hours. August 17th.—On examining the wound this morning a sulcus was found at the lower margin, dipping down between the muscles and skin, attended with gangrenous odor, and dark grey sloughs, to which bromine was applied with a swab. August 23d.—Patient says he does not sleep well. His appetite is moderate; tongue moist; pulse 108, of good strength; skin moist; temperature 93°. Nitric acid was applied to the wound. August 27th.—The sulcus is getting deeper, measuring two inches in depth, attended with strong fœtor. His foot and ankle are œdematous, caused by the obliteration of the external saphenous vein. Compound solution of bromine was injected into the sulcus with a small glass syringe, the wound covered with a cerate plaster, and the foot and leg bandaged to the knee. The patient's complexion remained sallow; skin moist; pulse 78, moderate; appetite moderate, *but craves acids;* temperature 82°; bowels regular. August 28th.—The sulcus was incised from the lower border of the wound to the os calcis; the tendo-achillis was found involved to its insertion. The compound solution of bromine was applied with a swab. August 30th.—His appetite is improved, his tongue is moist and clean; he says he does not sleep well; the œdema is extending up the leg. Bromine was again applied to the wound. September 1st.—He had a heavy chill about five o'clock this morning. His complexion is of a leaden hue; tongue moist; skin moist; has no appetite; breath saccharine; bowels regular. The sloughs readily came off this morning, leaving a clean surface. On the night of Sept. 2d he became delirious, and continued so until 2 P.M. on the third, at which time he died. Mortification had begun to extend from the foot up the leg twelve hours before his death.

Autopsy—Two hours after death: Body greatly emaciated; the lower and middle lobes of the right lung were engorged, and studded with metastatic abscesses; thrombi were found in the right ventricle, pulmonary arteries, and aorta.

CASE V.—Joseph A. Sullard, private, Co. A, 7th Mo., Confederate. On the 24th of July he was nursing a Confederate officer at the Officers' Hospital, who had gangrene—and while dissecting off the destroyed tissues from his wound he cut his ring and little finger with the scalpel, at the joint formed by the first and second phalanges. He applied nitric acid immediately. He also had a bruise on his left ankle, which, he says, the surgeon told him, was caused by a spent ball. On the 4th of August a scab formed, which he scratched off, and a sero-purulent fluid exuded from the wound. A flaxseed poultice was applied, and the next morning he was sent to Church Hospital.

The patient is weak; his mind much depressed; complexion sallow; appetite moderate; pulse 112, tolerably full; bowels regular. Says he has a slight burning pain in his ankle. On examination the joints of the ring and little finger are much swollen, presenting dark grey sloughs, extending over the posterior aspect. The external malleolus of the left leg is covered with a dark grey slough of uneven surface, two inches in breadth, and three in length, irregular margin, the edges everted, emitting a highly offensive odor. Dressings of oakum, saturated with liquor calcii chloridi, were applied to both wounds, and wet with the above solution, one part to eight of water, every two hours. The patient to have half-an-ounce of brandy every two hours, and nourishing diet.

The wounds continued to improve under the above treatment, and on the 12th inst. no gangrene remained. The extensor tendons of the fingers were destroyed, the phalanges falling apart, and the application of splints was necessary to keep the bones in apposition. The wounds were granulating healthily, the patient cheerful and hopeful, and says he feels much better. His appetite is good; tongue slightly coated; pulse 112, of good strength; temperature 100°. Everything was progressing favorably until the 7th, at which time he had severe rigors, for which twenty grains of quinia were given in two powders, two hours apart.

August 19th.—The wound is again invaded by hospital gangrene. The cellular and tegumentary tissues involved. Liquor calcii chloridi was applied and continued, the wound gradually improving until the 26th, when the wound measured five inches longitudinally, and three transversely. The external malleolus and fibula were uncovered, the latter for four inches upward. The external lateral ligaments were destroyed, and gangrene extending between the articulation and around the posterior border of the wound, involving the subcutaneous tissue. The compound solution of bromine was injected with a small glass syringe into the joint, and applied around the edges with a swab, and reapplied on the 29th. On the 30th no gangrene remained, but granulations did not appear until the third of September. His countenance was of a leaden hue; appetite poor; tongue dry; pulse 84, weak, compressible, and irregular. On the 8th the compound solution of bromine was again applied on a few dull looking spots, which it was thought might become gangrenous. The patient's general system began to improve; his appetite was better; tongue clean and moist; bowels regular. September 20th.—The patient's general health is improving. Pulse 100, of good strength; tongue moist and clean; he has a slight diarrhœa; skin moist. The granulations are abundant throughout the whole extent of the ulcer. The fibula on either side is covered with granulations. The external malleolus is completely covered. The patient has been gradually improving up to the present time. He has occasionally had slight diarrhœa, which was controlled by astringents. Cicatrization is now (Oct. 1st) extending over the wound, and the patient has every prospect of an early recovery. The wounds on his fingers have entirely healed.

From about the 20th of August to the third of September, there was evidence of a very serious derangement of the mechanical action of the heart. The face was somewhat bloated, of a leaden hue, with turgidity of the mucous membrane of the mouth and eyes, the eyes at one time for several days becoming almost inflamed. The foot and limb became swollen, and the granulations ceased to grow and became flabby. The heart gave evidence of a large thrombus in the right ventricle, extending to the pulmonary artery through the semilunar valves, which were prevented from closing, so that the blood regurgitated, and the pulse irregular, uncertain, compressible, and weak. This condition gradually passed away, and now the heart appears to perform its functions normally.

In treating these cases, great care was taken to keep the wards in proper conditions. Everything of an offensive character was immediately removed; the wards were thoroughly cleaned every day, and disinfectants in the form of chlorinated soda solution, permanganate of potassa, and bromine, were freely used. The patients' clothes were changed as soon as they became soiled, and were immediately washed, well aired, and perfectly dried before being used again. Stimulants were given internally every two hours, in the form of brandy, whiskey, wine, porter, and ale. Astringents given to check diarrhœa, and antiperiodics whenever they had rigors. The diet was nutritious, and varied to suit the appetite of the patient. The tendency to looseness of the bowels, which was characteristic in the majority of the patients suffering with gangrene, was carefully watched, and proper remedies immediately administered. In the application of local remedies to the wounds, bromine was preferred to any other. Nitric acid, Labarraque's solution, liquor calcii chlorinati, sulphate of zinc, creasote, &c., had been used since the opening of the hospital, but preference was given to bromine, pure, or in the form of the compound solution. One application of bromine has seldom failed to destroy the gangrene, when the wound had been properly prepared, and a second or third application has generally proved efficient. From twenty-four to forty-eight hours after the application the sloughs came readily off, leaving a healthy-looking surface. Before applying the bromine, the wound was well denuded of all dead tissue with the forceps and scissors, and thoroughly syringed with warm water, after which Labarraque's solution of soda was syringed into the various sinuses and sulci; the solution uniting with the ichorous discharge leaves the wound clean, at the same time stimulating the wound preparatory to the action of the bromine. Then a dry cloth was laid over the wound, and with a small stick made to penetrate into all the sulci and sinuses, to absorb as much of the moisture as possible. The wound being prepared in the above manner, the bromine was applied with a swab, or small glass syringe, and covered with a cloth spread with a simple cerate, the whole enveloped with a piece of oiled silk, and thus bandaged. The dressing was not disturbed until next morning, when the destroyed tissue, generally, readily came off, leaving a clean healthy-looking wound—to which oakum, saturated with Labarraque's chlorinated soda, was applied. Owing to the difficulty of thoroughly cleansing the wound, the bromine could not always be brought in contact with all the dead structures, but a second or third application seldom failed to produce the desired effect. The state of the patient's mind clearly indicated when the gangrene was destroyed. He would become enlivened, his appetite return with vigor, his pulse become stronger, and in a few days he would gain his strength, so as to be able to sit up or go about the ward.

Progress of Medical Science.

PREPARED BY E. H. JANES, M.D.

HÆMOSTATIC TREATMENT OF CHOLERA, HÆMORRHAGE, EXHAUSTION, ETC.

The writer, when in India, had unexpectedly a regiment prostrated with fever placed under his charge, and having but a small supply of quinine, he employed tourniquets to intercept the blood in the extremities, with a result so favorable as to induce him to bring the subject to the notice of the profession. There being about twenty-eight pounds of blood in the human body, and about two pounds in each of the four limbs, to enable us to relieve the congestion attendant upon intermittent disease, we have the control of at least a pound of blood in each limb by retarding it in the veins. This may be done with advantage in the premonitory symptoms of apoplexy, in severe cases of dyspnœa, in some organic diseases, and inflammations, where it is equivalent to the withdrawal of a certain quantity of blood from the general system. Another method of controlling the circulation is by stopping the arterial circulation in a limb. If a tourniquet is applied to the femoral artery, probably half of the blood intended for the limb is prevented passing into it and makes its way back to the heart, circulating through a smaller circle, and in some diseases proving a powerful tonic or stimulating effect upon the general system. This is apparent in those sudden and appalling cases of uterine hæmorrhage, also in the collapsed stage of cholera, where the system is so much prostrated that the most powerful medicines have no effect, the application of the tourniquet immediately removes the painful cramps; it increases the volume of blood, which stimulates the heart to increased action, removes congestion, changes the morbid distribution of blood from the secreting surface of the alimentary canal, and sets up a new and salutary action in its place. The purging and vomiting are thus stopped, the pulse becomes stronger, the heat and strength of the system are quickly restored, and time is allowed for medicines to act. When the individual is weak, and the state of collapse great, care is required in emptying by friction the blood in the veins of the extremity to be bandaged; and the effect will be more marked if the tourniquet be applied to four extremities. It may be kept on for hours, or even for a day or two. When reaction has taken place, the pressure of the tourniquet is complained of, and if it be loosened too abruptly the blood spreads over the extremities, and the patient rapidly sinks. A number of cases of cholera are reported, illustrating the treatment, and also the danger of a too sudden removal of the instrument, from which the following conclusions are deduced:—

1. By its obstructing the circulation it immediately stops the distressing cramps of the extremities in cholera.
2. By increasing the quantity of the circulating fluid in the trunk, and thereby stimulating the heart's action, it removes morbid congestions, stops the secretions from the bowels, increases the animal heat, and powerfully tends to restore health.
3. By improving the vigor of the system medicines act more powerfully, and in a more salutary manner, in removing morbid actions.
4. When the reaction has taken place, by loosening the tourniquets with care the determination of blood to the internal parts is diminished by its diffusion over the extremities upon which the tourniquet had been placed. They are immediately to be tightened when there is any coldness or weakness experienced, or any tendency to relapse. This must be most carefully watched for, and prevented.
5. By increasing the volume of blood in the contracted circulation, the force of the heart is increased, local congestions are removed, and the whole system is strengthened.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, Nov. 18, 1863.

DR. JAS. ANDERSON, PRESIDENT, IN THE CHAIR.

HYDATIDS OF THE UTERUS. DR. SQUIBB'S REPORT ON THE NEW U. S. PHARMACOPŒIA.

Dr. Finnell presented a specimen of hydatids of the uterus which was of interest from the fact that the patient was supposed by her medical attendant to be pregnant. Dr. F. had seen a case similar to this about five years before.

THE NEW UNITED STATES PHARMACOPŒIA. THE CHANGES THAT HAVE BEEN MADE, WITH THE REASONS FOR SO DOING.

Dr. E. R. Squibb, of Brooklyn, N. Y., a member of the Committee for Revision of the U. S. Pharmacopœia, reported that the work had been published, and made in substance the following statements in relation to the changes that had been made, together with the reasons for so doing.

Weights and Measures.—In the department of weights and measures the following changes have been made. The terms pound, drachm (for other than fluids), and scruple are disused, and all weights are expressed by the Troy ounce or grain. In writing for fluids the sign letter *f* should precede the ℥ or ʒ sign. The fluid measures are derived from the wine gallon. The term gallon is not used, its equivalent being expressed in pints. The use of the Arabic numerals is recommended as preferable to the Roman.

The Materia Medica list is divided into two sub-classes. I. Primary, and II. Secondary Lists. The first consists of those articles which are either of primary importance as remedies, or enter into the formulæ of the work, while the second class is formed of those which are of secondary importance and do not enter into the formulæ.

Chromic acid (acidum chromicum) is introduced as a valuable and self-limiting escharotic. Thus far it has been employed extensively in uterine diseases. It is applied through a speculum by a glass tube or a glass rod.

Lactic acid (acidum lacticum) is introduced for the purpose of making lactate of lime; and the *glacial phosphoric* *acid* is also placed in the primary list for the preparation of dilute phosphoric acid, a very valuable nervine tonic.

Fusel oil (Alcohol Amylicum) is introduced for making valerianic acid.

Aloes is divided into three varieties, I. Aloe Barbadensis, II. Aloe Capensis, and III. Aloe Socotrina, which is the best.

Ammonia alum (sulphate of aluminum and ammonia) is given for a choice as an ordinary astringent.

Aqua Ammoniæ fortior.—The term *aqua* is substituted for *liquor*, inasmuch as the former is intended to apply to a solution of volatile substances and the latter to fixed substances.

Belladonna Radix is added for the preparation of atropia.

Bromine is introduced to furnish the bromide of potassium, the reputed remedy for hospital gangrene.

Chiretta is added to the list of bitter tonics.

Chloroformum Venale.—Commercial chloroform is placed in this list to give an opportunity for prescribing the common article for external application, it being a great deal cheaper, and equally, for that purpose, as good as the pure.

Cinchona Flava.—The cinchonas are divided into C. flava and C. pallida, the flava (yellow) being the best.

Fermentum (yeast) is made officinal, that it may be written for in prescriptions; *gutta percha* is introduced for making the gutta percha collodion.

The Butter of Cocoa (Oleo theobromæ) is introduced as the best ingredient for suppositories.

Opium.—Opium must not be considered officinal unless it contain 7 per cent. of morphia.

Potassæ Permanganas is a most valuable disinfectant for carcinomatous growths, but hardly fit for anything else.

Saccharum lactis (sugar of milk) is introduced as a vehicle for alkaloids where it is necessary to divide very finely. It is very slowly soluble, and is by this means capable of disguising the taste of medicines.

Scammony must contain 75 per cent. of true resin to be officinal.

Sinapis (mustard) is divided into two varieties (white and black), both having different therapeutical properties.

Whiskey (spiritus frumenti), and bay rum (spiritus myriciæ) are officinal preparations. The former should contain 48 to 56 per cent. of alcohol, be free from odor, and be at least two years old.

Port and Sherry Wines are also officinal, the former is named Vinum Portense, and the latter Vinum Xericum.

Sulphur.—Sublimed sulphur is introduced to be used as an ingredient for ointments in cutaneous affections, inasmuch as it contains the sulphurous and sulphuric acid, which the washed rotund sulphur does not. This latter is used internally.

Dr. Squibb will continue his review at the succeeding meetings of the Academy.

There being no other business before the body the motion for adjournment prevailed.

The death of Dr. Chrestien, "the veteran of military surgery," at ninety years of age, is announced. He died at Lyons "full of honors and of years."—*Brit. Med. Jour.*

M. Bardinet, of Limoges, read a memoir before the Academy of Medicine upon an epidemic of jaundice, as it had affected puerperal women in that city. His memoir is based on twenty-five cases, three of which proved fatal. He has found it assuming three degrees: the *simple* or *benign*, which in nowise interferes with the progress of the pregnancy, this going on to its full term; the *abortive*, in which it is severe enough to determine abortion or premature labor, but leads to no further ill effect; and the *malignant*, in which the death of both mother and infant is rapidly produced. This epidemic prevailed extensively amidst the population of Limoges, but, with the exception of pregnant women, it proved in all a very mild affection. —*Med. Times and Gazette.*

American Medical Times.

SATURDAY, DECEMBER 12, 1863.

TREATMENT OF REBEL AND FEDERAL PRISONERS.

In our last number we presented the report of the recently liberated surgeons on the condition of the Federal prisoners at Richmond. The public sympathy has been deeply stirred by these narrations, and a feeling of intense indignation has been aroused. The conduct of the rebel authorities admits, in truth, of no palliation. The humane treatment of prisoners is a duty paramount to all others, and this violation of the usages of civilized warfare is an unmitigated barbarity, and altogether inexcusable. We alluded also on the same occasion to the humane treatment of rebel prisoners by our Government, and we should not again refer to the matter at length were it not that certain foreign medical periodicals are in the practice of charging upon the United States authorities a disregard of the amenities of civilized life in the conduct of this war. In the treatment of their respective prisoners we have a fair exponent of the civilization and humanity of the contending parties, and we propose briefly to exhibit the facts bearing on this subject. The Sanitary Commission has recently investigated the particulars of the treatment of both Federal and Rebel prisoners, and presented in the *Bulletin* the results. From this report we shall freely extract.

And, first, as to the treatment of Federal prisoners. In addition to the facts presented last week we gather the following from this report:—

"Of the 185 who escaped with their lives from the prisons of the rebel capital, eight died on the passage from City Point; several, almost immediately after landing, expired of inanition. Of 134 sent to the 1st Division Hospital, 43 had died up to Sunday last; and many more, exhibiting frightful signs of starvation, though still alive, are destined not to survive. On their arrival at the landing, many were in a dying condition; and were *alive* with vermin, filthy, and almost entirely destitute of clothing. Some had only shreds of a single shirt remaining, others the remains only of an old blanket around the body; most of them were footsore; 120 were without shoes; and so reduced, many of them, as to be beyond the reach of food or stimulants to restore them. All are unclothed, unsheltered, and unfed. Knapsacks are always taken from prisoners, and their contents stolen. The sick only are sometimes allowed to retain a blanket; other clothing, and boots and shoes, almost always are taken. Upon Belle Island there is no shelter for the thousands there, most of whom are sick and half naked, lying upon the ground; sand is incrusted into the sore backs of some; and the unanimous testimony of all about the food was, that it was a 'famine ration;' that men 'starved upon it.' The rations, meagre as they are, are not served regularly—but their distribution is dependent upon the mismanagement and caprice of officers *who sell them.* One officer, an intelligent Englishman, said, 'I have known the Quartermaster *to sell all the bread he could find sale for* and send the rest to the prisoners.' Some describe their imprisonment as 'a long struggle with hunger.' In answer to questions as to clothing and shelter upon Belle Island, one man said, 'the men mostly sleep in the sun in the daytime, and walk about all night, to keep warm.' A captain of cavalry said, 'the ration in hospital is one and a half ounces of meat, half a pint of their bean soup, and three slices of bread daily. A few bandages were distributed among the badly wounded, but no lint, and no medicines.' Another man said, 'I have seen half-starved fellows from Belle Island search about for crumbs on the floor on reaching the hospital, and devour their first scanty meal like hungry dogs; so nearly starved are they when sent to hospital that none of them live more than two days. They all die. I saw some of our poor fellows utterly crazy from want and ill-treatment. Others had forgotten their names, and the number and name of their regiment.' A prisoner from Belle Island says, 'they had some old tents there, but now nothing in the way of shelter is left but some old strips of canvas. The daily ration was ten pounds of beef and bones for one hundred men. It was sometimes bad; but we never minded that. One loaf of bread—often it was sour, and had lime in it—was divided in six slices; two slices and about one-quarter of a pint of boiled dirty water with a teaspoonful of beans in it, was all we got; but sometimes we didn't get that. The loaf weighed about a pound. The guard got a whole loaf a day. We sometimes got three or four spoonfuls of rice, but it was not boiled enough. The soup was made by adding one and a half pailfuls of soup, in which the meat and bones were boiled, to twenty pailfuls of hot James river water.' One man said, 'the *soup*, as they called it, was so thin, that except for the dirt in it, it would not stain a white handkerchief.'

Another says:—" 'Our ration was bread, and a *pint cupful* of rye, coffee, or the same quantity of soup made of rice and turnip leaves—*for twelve men.* The beans we got were always musty. In one room in the hospital were eighty-one patients with diarrhœa; forty of them died. Sometimes officers who were kept in a room above us bought food—potatoes and bread—and passed it down through holes where chains for hauling up tobacco passed. They often poured soup down to the hungry fellows, but they had to knock on the floor, and when the guard found us out we were deprived of our rations.' Several describe the hospital ration as barely sufficient for well men to keep alive upon; the sick were all too bad and weak to be benefited much by it. The water of James river, which was made into *soup*, when it was taken for the use of our men on the island, was black from the filth of the sewers which empty into it; the bread is often sour, and the meat without salt; disgustingly fresh; the rebel officers, when they can get salt, *sell it;* rice is always given half boiled. The quartermaster, after the bread is baked, sells all he can get pay for, and gives us our ration out of what is left. Rations were purposely served after dark, and the meat—a mouthful apiece for sixteen men—was thrown upon the floor in all the filth, where they had to divide it."

We close this testimony of the Federal prisoners in regard to their treatment, with the statement of GEN. NEAL DOW, who is still an inmate of the Libby prison.

" *We have only corn bread* (*unsifted*), *a little rice, and a few poor sweet potatoes and water for our rations.* The bread is about half a pound; the rice half a gill. I had today eight potatoes; only two were good for anything—medium size—the others not larger than one's finger!!"

In contrast with these tales of suffering and privation we present the following facts in regard to the condition and treatment of the rebel prisoners at Point Lookout, Maryland, one of the principal depots. Of the hospital the report says:—

"The hospital was situated in the southern part of the encampment, and was composed of eighteen hospital tents complete, arranged two together, end to end, and placed in two rows, a broad street intervening, with the cook and dining tent on the eastern end, and facing the street. In these tents there were one hundred patients, and all, with the exception of five or six, were on raised bunks, and all were lying on mattresses, with at least one blanket for covering. Eight of their own men were detailed to take care of them; and although they were enlisted men, yet six were graduates of some medical school, and the other two had been students. The rations were very good, both in quantity and quality amply sufficient for any sick man; but there are exceptional cases where they need something more delicate than the regular army ration. The majority are perfectly well satisfied, and very little complaint is made in this particular. The following is the full, half, and low diet:—

FULL DIET.	HALF DIET.	LOW DIET.
Dinner.	*Dinner.*	*Dinner.*
Beef or pork, 4 oz.	Meat, 2 oz.	No meat.
Potatoes, 4 oz.	Potatoes, 3 oz.	Potatoes, 2 oz.
Hard-tack, 3 oz.	Hard-tack, 2 oz.	Hard-tack, I oz.
Breakfast and Tea.	*Breakfast and Tea.*	*Breakfast and Tea.*
Coffee or tea, I pt.	Coffee or tea, I pt.	Coffee or tea, 1 pt.
Rice, 2 gills.	Rice, 1 gill.	Rice, I gill.
Molasses, I oz.	Molasses, ½ oz.	Molasses, ½ oz.
Hard-tack, 3 oz.	Hard-tack, 2 oz.	Hard-tack, I oz.

"Soup and soft bread are also given them at least once a week. Of their shelter there can be no possible complaint, for they all have good tents, such as wall, hospital, Sibley, wedge, shelter, hospital, and wall tent-flies. The majority are in the wedge tent. Average in a hospital tent, from fifteen to eighteen men; in wall tent, from ten to twelve; in shelter tent, three; in Sibley tent, from thirteen to fourteen; in wedge tent, five; under hospital-fly, from ten to thirteen; under wall tent-fly, from three to eight. Of the shelter tents, only a very few are excavated and boarded at the sides, and almost every tent throughout the camp has a fire-place and chimney, built of brick, made by them from the soil (which is clay) and sun-baked. In a few of the Sibleys holes are dug, fire built, and covered at the top; generally the tents are filled with smoke.

"The ration to the well men is for the day, pork, 3 oz. or salt beef, 4 oz.; hard-tack, 10 oz.; coffee, 1 pint. Soup is also given once a week, potatoes and beans every five days, soft bread once a week; and fresh meat had been issued to them once a week, up to two weeks ago, when, from some cause I could not find out, it was stopped."

The treatment of rebel prisoners at Point Lookout is no more kind and considerate than at other depots of prisoners. At David's Island, New York, where between two and three thousand sick were congregated after the battle of Gettysburg, every attention was given them and every want was supplied. In this review we would not be understood as boasting of the generosity of our Government, for we believe that it has only done its duty to its prisoners, but we do claim that when its conduct is in such striking contrast with that of the rebels it should not be accused of "foul blows," and of having violated every rule of civilized warfare.

THE WEEK.

FROM occasional newspaper rumors we gather some of the items which are to form the staple of the report of the committee appointed to investigate the alleged abuses in the Army Medical Department. They consist thus far of alleged purchases of hospital stores of particular individuals or firms, at a higher rate than was demanded in the general market. In this course the Surgeon-General deserves special commendation. He simply purchased pure drugs, and other articles of good quality, and paid accordingly for them. The instances are not few where medical purveyors have gone into the general market and purchased cheap drugs, but of the most impure kind. In patronizing a reliable house, and paying well for the articles purchased, the Surgeon-General has set an example which other departments may follow to advantage.

Deaths by chloroform are reported almost weekly in the London medical journals. Six have occurred during the last two or three months. But this fearful mortality does not seem to attract unusual attention, nor does it lead to any very practical efforts to correct the evils attendant upon its administration. A Chloroform Committee has been appointed to report upon the employment of this agent, but no other step has been taken. As usual, these cases have occurred where a very slight operation was about to be performed. It is probable that the fault generally lies in the manner of administration. This duty is generally intrusted to the junior physician present, and either to his ignorance or carelessness the fatal issue of the case may be traced. It would be better to discard this agent altogether than intrust it to incompetent hands.

The physicians of Boston are again moving in behalf of a Government appropriation to Dr. Morton, the alleged discoverer of "practical anæsthesia." A circular has been issued calling upon medical men to influence the representatives and senators in Congress with whom they may have acquaintance. It is signed by Dr. James Jackson, President of the Morton Testimonial Association, and by Dr. John Ware, Chairman of the Executive Committee.

Correspondence.

FIRST AMERICAN OPERATION FOR REMOVAL OF THE HEAD OF THE FEMUR.

[To the Editor of the American Medical Times.]

Sir:—Much importance having recently been attached to the removal of the head of the femur, in caries, etc., in the hands of Dr. Sayre and others, it may be well to call attention to the following case in the seventh number of the first volume of the *N. Y. Med. and Surg. Reporter* (January, 1846). It is a detailed account of an operation of this kind, the first ever performed in this country, and at the time original with the operator. It will be seen to have been performed during the summer of 1845.

W. C. R.

New York, Dec. 8, 1862.

"Removal of the Head of the Femur.—This important operation was performed by J. P. Batchelder, M.D., of Utica, N. Y., during the past summer, and we are indebted to a friend for the following particulars of the case, which, if incorrect in any particular, we beg to be corrected when the operator shall have seen this article. The subject of the operation was a young man, about twenty years of age,—he received an injury at the hip-joint from the kick of a horse, some four or five years previously, and had not been able to use the leg from that time, up to that of the operation. The limb had become somewhat atrophied, and was about two inches shorter than its fellow. There were two fistulous openings, which kept up a continual discharge, and consequently his general health had become very materially impaired. The fistulous openings, above alluded to, were situated between the trochanter major and the tuberosity of the ischium, one above the other, and about three inches apart. Upon introducing a probe at either of the sinus-openings, a bone was felt, which was supposed to be the head of the femur necrosed; but whether it was detached or not, could not be determined. The dead bone, which lay in the direction of the acetabulum, was about three inches from the surface, owing to the tumefied condition of the soft parts. The Doctor, at first, prepared to make an incision down to the bone, and extract it, but owing to the state of the general health of the patient, he decided on a slower and equally certain, and perhaps safer mode; which was to introduce tents of compressed sponge, for the purpose of dilating the openings, the spongia præparata being inserted every night and morning, pro re nata, and gradually enlarging the quantity. In the course of ten days, the openings were considerably enlarged, in consequence of which, by the use of the probe, it was fully ascertained that the head of the bone was detached. The Doctor then introduced an eyed probe, very much curved, and armed with a ligature, attached to which was a cord of about one-tenth of an inch in diameter; he succeeded in passing the curved probe in at the lower opening, and along the bone, until it could be felt at the bottom of the one uppermost, when it was seized with strong dressing forceps, and after some trouble, but without much pain, drawn out through that aperture, and tied with a slip-knot over the intervening flesh, so as to be tightened daily, which was continued for about a fortnight, when it having completely effected the object for which it was employed, dropped off. On passing the finger deep into the chasm, the bone could be distinctly felt, and was ascertained to be slightly movable. A further and more particular exploration was now made, and the scoop end of a strong director hitched under one of its edges, by means of which it was slightly raised, which enabled the Doctor to grasp it with the forceps, and by turning it still more up, he finally succeeded in bringing it out edgewise through the external wound. The bone taken away, proved to be the head of the femur.

"The wound was dressed by introducing a fold of lint between the lips of the wound, passing it to the bottom of the cavity, and a compress and bandage applied. In the course of a few weeks, the entire wound was healed, with the exception of a small opening, which appeared to be about half an inch deep, over which he applied small blisters in succession, by means of which, and the use of Tr. canth. and tonics, it was soon completely healed. His general health rapidly improved under a constitutional treatment, until he was discharged, completely cured.

"In three months after the removal of the bone, he laid aside his crutches, and by the help of a cork-soled shoe, walked short distances quite easily, and somewhat gracefully.

"It may be said by some, that the *knife* would have been preferable to the slower means used, but it was adopted upon the Golden Rule, 'do unto others as we would wish to be done by,'—a principle which should always govern us in surgery, as well as in morals.

"What must have been the condition of the hip-joint from the time of the injury up to the time of the operation? Was the neck of the bone fractured and dislocated at the same time, by the kick from the horse, some years previously? Or was the neck of the bone merely fractured, and the head left remaining in the socket, and acting as an irritant, causing the cotyloid ligament to be absorbed, thus freeing itself from the acetabulum? Or could it be that there was morbus coxarius caused by the injury, and followed by necrosis of the head of the bone? Our informant has not given us enough of the early history of the case, in order to decide an important question.

"The operation for removing the superior extremity of the femur, for hip-disease, has been performed twice in England, which was unknown to Dr. Batchelder, at the time of his operation; hence, the operation was original with him."

The discussion on hydrophobia at the Academy of Medicine has resulted in the appointment of a rabies committee, charged with the duty of investigating prophylactic measures, and endeavoring to procure the extinction of this scourge of the canine race.

Army Medical Intelligence.

(CIRCULAR No. 26.)

Surgeon-General's Office,
Washington, Nov. 24, 1863.

The attention of Medical Officers in charge of United States General Hospitals is invited to the importance of preparing illustrations of the results of surgical operations. These can in many instances be conveniently obtained by means of plaster casts, which are readily made without subjecting patients to the slightest inconvenience.

The casts most desired are those of stumps of amputations of every variety, and models of limbs upon which excisions may have been performed.

In selecting proper subjects for representation, it would be well to choose not only cases in which the results have been favorable, but also those in which they have been unfavorable. In a collection like the National Museum, truthful representations of both good and bad results are alike instructive and valuable for future reference and study.

These casts, when made, should be forwarded to the Army Medical Museum by Express. The expressage will be paid in Washington. All preparations should be accompanied by proper histories, with name, rank, and station of the contributor, who will be duly credited in the Museum Catalogue.

Jos. K. Barnes,
Acting Surgeon General.

Surgeon-General's Office,
Washington, Nov. 21, 1863.

Sir—The Secretary of War having authorized the payment for washing from the appropriation for the Medical Department, for those hospitals and hospital steamers where a sufficient number of laundresses cannot be employed, you are directed to have the bills contracted under these circumstances, presented to the nearest Medical Disbursing Officer for payment.

By order of the Acting Surgeon-General.
C. H. Crane, *Surgeon, U.S.A.*

To Medical Directors.

Surgeon-General's Office,
Washington, Dec. 20, 1863.

Sir,—The Acting Surgeon-General directs that the accounts of officers, treated in General Hospitals, be hereafter rendered to this office only at the time of their discharge from the Hospital, or of their decease while in it, instead of being forwarded monthly, as heretofore. The account of each officer is to be made out separately, embracing his total indebtedness from the date of his entry, to that of his leaving it, and is to be transmitted promptly at the latter time.

By order of the Acting Surgeon-General:
C. H. Crane, *Surgeon, U.S.A.*

To Medical Directors.

ORDERS, CHANGES, &c.

Ninety-three Surgeons and Assistant-Surgeons arrived in Washington, D. C., on the 26th inst., from the Libby Prison, Richmond, Va. Surgeon Daniel Meeker, U.S.V., Medical Director to General Milroy, is among the number. They have been granted twenty days' leave.

Surgeon John W. Brennan, 1st U. S. Sharpshooters, has been honorably discharged the service of the United States, on account of physical disability from wounds received in action.

Upon the recommendation of a Board of Officers, instituted by Special Orders No. 285, June 27, 1863, from the War Department, Surgeon C. M. Stockwell, 27th Michigan Vols., has been honorably discharged the service of the United States, on account of physical disability.

Leave of absence has been granted Surgeon J. R. Duncan, 87th Kentucky Vols., to enable him, as member of the Legislature of Kentucky, to attend the coming session thereof. As soon as the Legislature adjourns, he will at once return to his regiment.

Assistant-Surgeon H. Eversuian, U.S.V., has been assigned to duty in the office of the Medical Director at Louisville, Ky.

Surgeon Geo. H. Hubbard, U.S.V., has been relieved as Medical Director, District of South-western Missouri, Springfield, Mo., and assigned to duty at Fort Smith, Arkansas, as Medical Director, District of the Frontier.

Surgeon A. T. Watson, U.S.V., has relieved Acting-Assistant-Surgeon J. M. Pilsbury, U.S.A., in charge of General Hospital No. 1, Louisville, Kentucky.

General Hospital, McKin's Mansion, Baltimore, Md., has been discontinued.

Medical Inspector Vollum, U.S.A., reports from Chattanooga, that there are sufficient accommodations for all the wounded in the late battles at Lookout Mountain, Mission-Ridge, &c., and that medical supplies of all kinds are ample.

Surgeon Israel Moses, U.S.V., has been assigned to duty as Medical Director and Superintendent of Hospitals at Murfreesboro, Tenn. The badly wounded of "Chickamauga" have been sent there.

Surgeon Bernard Beust, U.S.A., has assumed charge of the United States General Hospital, Pittsburg, Pa.

Surgeon W. C. Otterson, U.S.V., has been assigned to duty in charge of General Hospital No. 8, Nashville, Tenn.

Surgeon R. K. Smith, U.S.V., to duty as Medical Director, Port Hudson, Miss.

Surgeon S. N. Sherman, U.S.V., to duty in charge of General Hospital, Grafton, Va.

Surgeon Henry Buckmaster, U.S.V., has been relieved from duty as Medical Director, District of the Frontier, and is awaiting orders at Leavenworth city, Kansas.

Surgeon Thomas B. Reed has been assigned to duty in charge of General Hospital, Parkersburg, Va.

The following Orders have recently been issued from the War Department:

Surgeon Alexander Ewing, 13th Michigan Volunteers, recently released as prisoner of war from Richmond, Va., will join his regiment. Permission to delay reporting until January 1, 1864, is hereby granted him.

The following Medical Officers, recently released as prisoners of war from Richmond, Va., will join their regiments. Permission to delay reporting for thirty days is granted them:—

Surgeon E. M. Seeley, 21st Illinois Vols.; Assist.-Surgeon D. B. Wren, 75th Ohio Vols.; Assist.-Surgeon William Spencer, 73d Indiana Vols.; Assist.-Surgeon R. R. McCardless, 110th Ohio Vols.; Surgeon W. A. Rogers, 3d Tennessee Vols.; Assist.-Surgeon P. G. Barrett, 7th Ohio Cavalry; Surgeon William M. Houston, 122d Ohio Vols.; Assist.-Surgeon, W. B. Hornbrook, 42d Indiana Vols.; Surgeon J. L. Woodin, 68th Indiana Vols.; Surgeon Daniel Meeker, U. S. Vols.; Assist.-Surgeons Josiah L. Brown, 116th Ohio Vols.; Charles D. Simpers, 6th Maryland Cavalry; Alexander M. Parker, 1st Maine Cavalry; Surgeons A. W. Whitney, 13th Massachusetts Vols.; L. Holbrook, 8th Connecticut Vols.; George B. Luminus, 13th Pennsylvania Cavalry; W. F. McCurdy, 87th Pennsylvania Vols.; W. B. Gavran, 26th Ohio Vols.; James T. Reeves, 21st Wisconsin Vols.; O. Q. Herrick, 34th Illinois Vols.; S. B. Hawley, 35th Illinois Vols.; L. J. Dixon, 1st Wisconsin Vols.; William Forrister, 5th Kentucky Cavalry; J. Shrady, 2d East Tennessee Vols.; C. W. Fowler, 105th Ohio Vols.; J. M. Cook, 24th Ohio Vols.; J. M. Rice, 25th Massachusetts Vols.; J. McCurdy, 11th Ohio Vols.; T. L. Magee, 51st Illinois Vols.. C. Helm, 92d Illinois Vols.; Assist.-Surgeon W. H. Lemon, 82d Indiana Vols.; Surgeons H. J. Herrick, 17th Ohio Vols.; George P. Ashman, 93d Ohio Vols.; J. R. Brelsford, 74th Ohio Vols.; Christopher S. Arthur, 75th Indiana Vols.; Assistant-Surgeons J. C. Fruit, 54th Pennsylvania Vols.; G. H. Blaker, 21st Michigan Vols.; G. E. Ranny, 2d Michigan Cavalry; J. K. Moore, 13th Ohio Vols.; R. A. Tullis, 7th Ohio Cavalry; A. J. Lang, 2d Tennessee Cavalry; C. P. O. Hanilon 90th Ohio Cavalry; E. M. Howland, 24th Ohio Vols.; W. H. Graham, 101st Indiana Vols.; S. E. Holzman, 58th Indiana Vols.; A. L. H. Burnett, 8th Tennessee Cavalry; W. G. McFadden, 79th Indiana Vols.; O. Nellis, 2d Virginia Cavalry; J. R. Uhler, 67th Pennsylvania Vols.; A. V. Ketchum, 83d New York Vols.; J. N. Miller, 120th New York Vols.; E. K. Hogan, 120th New York Vols.; S. L. Henry, U.S.A.; Acting Assist.-Surgeon Lewis Applegate, 102d New York Vols; Assist.-Surgeons Thomas F. Morgan, 10th Missouri Vols.; F. Smith, 116th New York Vols.; A. A. Mann, 1st Rhode Island Cavalry; N. S. Looker, 6th Illinois Cavalry; F. H. Patten, 12th Virginia Vols.; M. F. Bowes, 12th Pennsylvania Cavalry; J. W. Brown, 22d Illinois Vols.; N. H. Sidwell, 11th Ohio Vols.; A. H. Landes, 35th Ohio Vols.; A. H. Shaffer, 75th Indiana Vols.; D. D. Benedict, 17th Ohio Vols.; H. T. Woodruff, 100th Illinois Vols.; R. J. Hill, 45th Ohio Vols.; E. D. W. C. Wing, 57th Ohio Vols.; J. J. Sheldon, 45th Ohio Vols.; W. A. Downey, 58th Illinois Vols.; E. F. Purdam, 89th Illinois Vols; W. G. Bell, 55th Indiana Vols.; Robert Johnson, 100th Ohio Vols.; F. Corfe, 1st Wisconsin Vols.; J. M. Weaver, 93d Ohio Vols.; C. R. Pomeroy, 33d Ohio Vols.; J. C. Elliott, 18th Kentucky Vols.; H. A. Goodale, 21st Michigan Vols.; W. D. Towts, 81st Indiana Vols.; H. S. Griswold, 11th Michigan Vols.; H. T. Lacey, 101st Ohio Vols.; N. L. Hosack, 78th Pennsylvania Vols.; J. T. Walton, 103d Pennsylvania Vols.: Surgeon Frederick Wolfe, 39th New York Vols.; Assist.-Surgeons G. Bingel, 52d New York Vols.; E. Humphrey, 142d Pennsylvania Vols.; Surgeons Joseph Fittman, 18th Kentucky Vols.; S. J. Young, 79th Illinois Vols.; H. M. Morrison, 23d Kentucky Vols.; E. A. Merrifield, 44th Illinois Vols.; Assist.-Surgeons W. H. Park, 49th Ohio Vols.; W. A. Carmichael, 2d Ohio Vols.; G. W. Withers, 18th Pennsylvania Vols.

W. Pryor, having withdrawn the acceptance of his appointment as Assistant-Surgeon, 1st U. S. Colored Troops, and not having been mustered into service, said appointment is hereby revoked from its date.

Medical News.

The Anniversary Dinner of the New York Society for the Relief of Widows and Orphans of Medical Men, will be given at the Metropolitan Hotel, Thursday, December 17th, at 7 o'clock P.M. The Stewards are, Drs. S. T. Hubbard, J. J. Crane, T. C. Finnell, J. R. Vankleek, C. D. Smith, J. W. Greene, R. A. Barry; from whom tickets may be obtained.

Original Lectures.

AMPUTATIONS IN GUNSHOT FRACTURES OF THE THIGH,

BEING REMARKS MADE AT THE MEETING OF
THE SURGICAL SECTION OF THE N.Y. ACADEMY OF MEDICINE,
Held Nov. 27, 1863.

By E. KRACKOWIZER, M.D.,
OF NEW YORK.

The patient I present, is twenty-one years old, and was wounded at the battle of Fredericksburg, Va., December 13, 1862. The ball struck the left thigh on its anterior aspect, a little below the middle, and taking an oblique upward and backward course, passed out not quite two inches below the gluteal fold, shattering the bone. He received no treatment looking to a coaptation of the fracture, except on the seventh day after the injury, when a couple of splints were applied to make his transportation to the steamboat, leaving Aquia Creek for Washington, easier. On the eighth day he was admitted in Mount Pleasant hospital. From what he describes there is no doubt that Dr. N. R. Smith's anterior splint was applied, and the limb swung up with a couple of cords. The treatment was simple, and although much troubled with diarrhœa, then so prevalent in our military hospitals, consolidation was so firm after three and a half months, that he could be discharged, his relatives receiving permission to take him to New York, where he arrived about the middle of April, 1863. I found him moderately emaciated and feverish, the diarrhœa still persisting. The thigh as well as the leg was greatly swollen, and the suppuration from both wounds was quite abundant. A very massive callus indicated the seat of the fracture between the middle and upper thirds. A probe, introduced through the anterior wound, struck dead bone immediately. April 18.—The anterior wound was enlarged, and an irregular fragment of the ball with some pieces of bone was removed. On probing with the finger some more dead bone was felt, around which the callus was fused, and situated nearer the posterior aspect of the thigh. So another incision was made, three inches long, reaching the callus between the biceps and semimembranosus muscles. By taking away liberally from the callus with the gnawing forceps, a complete canal was made through the callus, and some more necrosed splinters—fourteen altogether—the majority quite firmly encased, removed. The upper end of the lower fragment felt quite suspicious—like necrosed bone—but its removal almost necessitating the reproduction of the fracture, it was left. The condition of the patient some time after the operation caused me a great deal of anxiety. The diarrhœa was at times very rebellious, the appetite very varying. May 7.—Patient complained of pain in the chest, and the stethoscope detected friction-sound in the region of the heart. Happily no serous exudation in the pericardium followed, and the inflammation subsided after a few days under application of cold water compresses. About the same time the face became slightly buffed, and the chemical examination of the urine, which previously at irregular ntervals had shown rich sediments of urates, detected albumen, the microscope casts and epithelium of the Belinian tubes in different stages of fatty degeneration. Yet from the middle of June the condition of the patient took a better turn, and towards the end of July all the wounds had healed. He commenced to take exercise on crutches, first in the room, then in the open air. Aug. 19.—Coming home from a walk in one of the parks near his residence, he was taken with severe pain in the thigh, and at the ame time with a chill, followed by a burning fever. The high became at once very swollen, and all the cicatrices opened, rapidly assuming the character of sloughing ulcers, discharging a moderate quantity of very fetid, thin sanies. I was looking forward for the expulsion of necrosed bone, or some other foreign substance, like a piece of dressing. But nothing came, nor could anything be detected with the probe. By diligent application and injection of a solution of permanganate of potassa, in three or four days the wounds assumed a healthy character, and cicatrized again. Twice since did they break again, but not near under so bad general as well as local symptoms. Since three weeks they are closed, and look as healthy as scars as any could be seen. There is nowhere any infiltration of the soft parts, the muscles being laterally movable over the callus, which is considerably diminished in bulk from what it was before the operation. There is lateral displacement of the fragments outwards, and the lower end of the upper fragment has a very well marked inclination backwards, a condition of things frequently observed by Prof. F. H. Hamilton in complicated fractures of the thigh, when treated with Dr. N. R. Smith's anterior splint. The shortening amounts to nearly two inches. There is still considerable stiffness of the knee, as well as of the ankle-joint. Patient wears a shoe with a sole two inches high. He can walk a few steps unsupported, but for locomotion relies mainly on crutches, by the aid of which he can take a walk of a mile or more, resting himself for a short time after a few blocks' travel. His general health is as good as ever.

In relation to the subject which occupies us this evening, Mr. Chairman, I have looked through the writings of the modern authors on military surgery in Germany. I will state briefly their views on the treatment of the gunshot fractures of the thigh.

Fr. Esmarch and L. Strohmeier report thirty cases of gunshot fracture of the thigh, occurring during the Sleswick-Holstein war, from 1848–1851, treated on the conservative plan, of which fifteen recovered with more or less useful limbs. Strohmeier has the measurements of twelve out of these fifteen cases. The shortening was in one case five inches; in one case four inches; in four cases three inches; in five cases two inches; and in one case one inch. During the same time for the same injury 128 amputations of the thigh were made, of which only 51 recovered. So the statistics are decidedly in favor of the conservative treatment. It is to be regretted that no classification of the amputations is made, whether primary or secondary, nor in which portion of the thigh.

With the practice of the surgeons of the opposing Danish army I am not acquainted, but the inference is strong that they were guided by similar considerations, as after the peace five soldiers of the Sleswick-Holstein army were returned with useful limbs after gunshot fractures of the thigh (included in Strohmeier's and Esmarch's tables, they returning four such Danish soldiers).

During the Crimean war, as is well known, the experience of English as well as French surgeons, when attempting to save limbs with fractures of the thigh from gunshot, was so discouraging that *McLeod*, *Matthew*, and *Baudens* reject the conservative treatment. Of 174 soldiers and 20 officers of the English army with complicated fractures of the thigh in general, only 14 privates and 5 officers recovered. Yet they were not much more fortunate by attempting to save life by sacrificing the limb. Of 164 amputations of the thigh there are 107 fatal results.

Of 39 amputated in the upper third 34 died.
Of 65 " " middle " 39 "
Of 60 " " lower " 34 "

Herman Demme, during the late Italian war, gives his experience with the Franco-Sardinian army as follows:—

GUNSHOT FRACTURES OF THE THIGH.

Conservative Treatment.

Upper third,	43 cases,	18 recoveries	(42 p.c.)
Middle "	46 "	18 "	(39 p.c.)
Lower "	76 "	43 "	(56½ p.c.)
Total,	165 "	79 "	(50 p.c.)

Among the 79 recovered cases 20 limbs are pronounced as useless, or nearly useless, which, of course, does not affect the proportion of mortality between treatment by amputation and conservative surgery.

Amputations of the Thigh in the Italian Hospitals.

(No enumeration of primary and secondary amputations.)

Upper third,	109	amputations,	95	deaths,	(87 p.c.)
Middle "	158	"	114	"	(72 p.c.)
Lower "	125	"	77	"	(61½ p.c.)
Not stated,	39	"	35	"	(89½ p.c.)
Total,	431	"	321	"	(74½ p.c.)

If this tabular statement of *Demme* did not already show that French and Italian surgeons pursued a discriminating course in the treatment of gunshot fractures of the thigh, it would become apparent from an article of *Jules Roux* in the *Gazette hebdomadaire*, May 11, 1860, wherein he reports in the Hospital *Saint Mandrier*, in *Toulouse*, 21 French soldiers returned from Italy with consolidated gunshot fractures of the upper half of the femur.

The experiences of Austrian surgeons during the same war have not been collected, as far as I know, but from the report of cases in one or two medical journals, edited in Vienna, it is evident that a selection of cases was made in which to attempt to save the limb and in which to amputate.

Altogether, I think there is no doubt that the views of almost all the modern military surgeons, on this Continent and in Europe, drift to the point that there are many gunshot fractures of the thigh in which amputation, as a life-saving practice, must be rejected, and in which the indication is more or less clearly defined to save the limb.

The conditions *favorable* for saving the limb, as laid down by *Strohmeier* and *Esmarch* among the German writers, are these:—

1. The ball has passed through the limb.
2. Shortness of the track of the wound.
3. Position of the wound more on the outer half of the thigh, distant from the large vessels.
4. Splintering not very extensive.
5. Fracture not lower than a hand's breadth above the articular line of the knee-joint.
6. The most favorable condition is, if the ball did not pierce the parts; when there is little difference from a simple fracture.

Circumstances *unfavorable* for saving limb and life:—

1. The ball and other foreign substances remain in the neighborhood of the fracture.
2. The ball has taken a rather oblique direction to the axis of the bone, making a long wound track, causing more extensive splintering, and rendering the drainage of secretions difficult.
3. The wound-track is situated near the large vessels, or the probing with the finger gives evidence that several fragments have been thrown in the course of the large vessels. Danger from phlebitis, thrombosis, and pyæmia.
4. Extensive splintering, indicated by great deformity and shortening.
5. As regards life, the lesion is the graver the nearer the trunk.

Contra, *Larrey*, *Sen.*, *Demme*, rejects amputation the higher up the fracture has taken place.

As regards *treatment*, the authors cited above concur in the following rules:—

1. The extraction of loose fragments and foreign substances ought to be made before the swelling commences, and, if possible, under chloroform. Splinters adherent should not be removed.
2. The first dressing should be made on the field, and, if possible, after the adjustment of the dislocation.
3. If the first dressing be well done, it ought not to be disturbed in the hospital, if the pain, dislocation, and swelling be moderate.
4. If no dressing on the field was made, the patients are generally received in the hospitals with limbs so swollen and shortened that no permanent dressing can do any good.
5. The dilatation of the wound with the knife is only indicated if there be *considerable serous infiltration*, and closure of the wounds from swelling. But even then bleeding and ice are frequently preferable, because the enlargement of the wounds admits air and favors the increase of suppuration.
6. Enlargement of the wounds is absolutely necessary where there is bloody infiltration.
7. Where the serous infiltration forbids the application of permanent dressing, the patient ought to be put on a good mattress in Pott's position.
8. Only after the swelling begins to subside, a thing that sometimes may take weeks to occur, is it time to think of making a change of position.
9. No rule can be given how the limb ought to be put definitely. The best rule is, not to lay too great stress on having a good shape of the limb, but to look to saving life and gaining consolidation.

Strohmeier and *Esmarch* are both opposed to primary resection.

In the first year of the Schleswig-Holstein war, when *Langenbeck* was Surgeon-General, under the influence of the teachings of *Baudens* (*Clinique des plaies d'armes à feu*, Paris, 1836), the removal of splinters, loose as well as adherent, and the resection of the sharp ends of the fragments, was resorted to as a rule. Of three resections in gunshot fracture of the thigh, all died. Although this is too small a number to make a deduction, yet the comparison with gunshot fractures of other long bones, treated by and without resection, speaks for the latter practice as preferable. *Strohmeier*, who succeeded *Langenbeck* 1849, from what he had already seen in Baden 1848, inaugurated this method.

Although not strictly pertaining to the matter under discussion, it may be permitted, Mr. Chairman, to give the results of both practices in gunshot wounds of long bones, other than the femur.

Arm.—1848, 9 primary resections. 4 died, of the 5 living a couple retained a very crippled limb.

1849. No resections. 7 cases, 1 died.

1850. No resections. 25 cases, 4 died. Use of limb in the 21 cases recovered perfect, of which one case of extreme splintering from a canister shot.

Forearm.—1848, 6 cases; primary resection; healing very protracted.

1849. 7 cases. 1 primary resection. Result the same. In the other 6 cases healing very rapid.

1850. 41 cases. No interference. All recovered except one who died of cholera. In 6 cases both bones, in 16 the radius, in 18 the ulna was shattered, 1 case not stated.

Leg.—1848, and part of 1849, 13 cases (3, both bones; 7, the tibia; 3, the fibula). Primary resection, 7 died (2 tibia and fibula, 4 tibia, 1 fibula).

Other part of 1849 and 1850. 58 cases (8 tibia and fibula, 27 tibia, 23 fibula). No interference. 52 recovered with good limbs. Of six who died, in 1 tibia and fibula; in 2 the tibia; and in 3 the fibula was shattered.

The French Mexican expedition furnishes an additional example of the freedom of the negro race from the diseases which in hot climates exert so devastating an effect upon whites. M. Reynaud, Inspector-General of the Marine Force in Mexico, addresses a letter to the Academy of Medicine, in which he states that the last epidemic of yellow fever exemplifies the above fact, just as did that of 1862. While the yellow fever produced great numbers of victims amongst the Europeans employed at Vera Cruz and the fort St. Jean d'Ulloa, not a single death from this cause occurred among more than 600 soldiers and sailors from the West Indies, almost all of them yet undergoing the most trying labor.

Original Communications.

SEVENTEEN ADDITIONAL CASES

OF AMPUTATIONS FROM THE ARMIES OF THE SOUTH-WEST.

By JAMES BRYAN, Surgeon, U.S.V.
ON GENERAL GRANT'S STAFF.

The following cases were collected in the early part of September last, in the hospitals of Memphis, Tenn., at leisure intervals, while attending to the duties of an Examining Board in that city. The original paper which contained these cases and others, to the number of thirty, was mailed at Memphis on the 8th of Sept., but has failed to reach its place of destination. The present article has been drawn up from some of the rough notes, remaining in my hands, belonging to the former article.

These cases are offered as a continuation of those published in the Med. Times on the 4th of July last. I have therefore continued the enumeration in order to connect the present with that list.

It will be observed, first, that these are all necessarily successful cases—the reports being made from two to four months after the occurrence of the operations. Little, therefore, can be inferred in reference to the value of amputation or any class of amputations, as a means of saving life. To obtain this kind of information, the publication of all the cases operated upon, with their results, is necessary. Something, however, may be gained by reciting a series of different kinds of amputations, with the incidents connected with them, the general results of which are successful.

These cases present most of the peculiarities which are found in military surgery. The men, for instance, had generally been worn down by a long siege, fatiguing marches, and numerous battles. They had been subjected to all the privations of an active campaign, and some of them to those of several, being deprived of the usual camp equipage, bivouacking, and being exposed to the weather and irregular rations for months previous to the occurrence of the wounds which made the amputations necessary. The climate and the season were well calculated to debilitate and poison their systems; thus preventing the healing process from taking place, in tissues exposed to violent solutions of continuity. In addition to all this, many of them had been transported four hundred miles in hospital boats, from the battle-fields to Memphis; most of these cases were operated upon before being removed from the field; and were subjected to the inconveniences of transportation immediately after suffering their amputations. Others were operated upon after their removal, and therefore were subjects of what is always considered a dangerous expedient, viz. a secondary operation. The following facts may, perhaps, be gleaned from the perusal of these cases: first, gangrene, erysipelas, and other forms of the degeneration of the tissues, producing losses and non-union of the latter, are apt to follow operations performed under the circumstances above recited; 2. These conditions of the injured tissues are most apt to follow in localities where the white tissues prevail near the distal extremities, especially near the ankle and wrists; 3. That after an uncertain period, generally two or three weeks—sometimes longer—where the patient enjoys the necessary conditions calculated to restore the health of the system, this tendency ceases, and the recuperative forces of the constitution cause the wounds to heal healthily. In these cases secondary or even tertiary operations may be necessary. 4. Although I have not recorded the fact, most of these cases were young men between the ages of 18 and 25 years. They were therefore, except as far as the conditions above mentioned go, in favorable circumstances for health. 5. These cases show, especially the first sixteen which I have published, that our military surgeons are generally favorable to the double flap operation, in preference to the circular. It will be found, I think, that the circular operations are preferred by the older members of the profession, especially when performed on the thigh, and that the younger ones resort more frequently to Liston's method. The Continental Europeans appear certainly to prefer the old methods. Both of these modes, both in the army and out of it, have doubtless been abused, by careless and ignorant practitioners. 6. Several cases of severe gunshot wounds of the knee-joint are reported in this series, treated successfully by amputation of the thigh. In collecting these cases I have necessarily fallen upon many interesting ones of resection, which I have not reported, but which, if reported, would present an opportunity of deciding on the relative value of these two modes of operating.

CASES AT GAYOSA HOSPITAL, MEMPHIS, TENN.

Case XVII.—George Kern, private, Co. A, 8th Indiana, was wounded in the left foot at Vicksburg, May 23d, and underwent secondary amputation in the lower third of the limb. The circular form was adopted. The stump was attacked by erysipelas; but at this writing, Sept. 1st, it is nearly well, and the patient is reported as recovered.

Case XVIII.—Samuel Oleon, corporal, Co. K, 10th Iowa. This was a case of gunshot fracture of the right wrist, involving the lower end of the radius. Secondary amputation by circular operation was resorted to in the lower third of the forearm. The wound was received at the battle of Champion Hills, May 16th. The patient was brought to Memphis, where the limb was attacked with sloughing, and secondary amputation was performed. The patient did well, and the wound is nearly healed.

Case XIX.—Stephen Brayton, private, Co. A, 10th Ill. Gunshot wound in the right hand, received June 26th, at Vicksburg. An attempt was made to save the hand, but without effect. The bones were denuded by sloughing, and fractions of them were removed in two several operations. It was finally resolved to amputate the forearm, which was done, by circular operation, in the middle third. The wound has healed kindly, and the ligatures have all come away.

Case XX.—Louis Cazeau, private, Co. B, 113th Illinois. This was a wound of the right arm by a cannon ball, received May 28th at Vicksburg. Primary amputation, by circular operation, was performed in the middle third of the arm. As in many other of these cases, gangrene took hold of the stump, and for a time threatened to denude the bone. But, by careful dressing, and the use of nitric acid externally, and iron internally, together with stimulants and a generous diet, the patient has finally recovered.

Case XXI.—Giles Marsh, corporal, Co. G, 17th Iowa. A gunshot wound of the foot, fracturing several of the bones, was received at Champion Hills, May 16th. After some time had elapsed, in an attempt to save the whole foot, an exsection was resorted to, which involved the four small toes and metatarsal bones. The wound healed kindly, and the patient has recovered, and has a comparatively useful foot.

Case XXII.—S. L. Morse, private, Co. E, 24th Iowa. This was a gunshot wound of the right knee-joint, received May 16th at Champion Hills. Primary amputation of the thigh in the lower third, by double operation, was resorted to. In this case, again, the soft parts were attacked by gangrene, which was arrested by the usual treatment, viz. nitric acid externally, iron and stimulants internally. The wound has healed, and there remains now only a little tenderness.

Case XXIII.—Jas. N. Underwood, private, Co. B, 8th Indiana.—The patient was wounded at Vicksburg, May 23d, in the left forearm. The bullet passed through the arm, fracturing both bones. Primary amputation, by the circular method, was performed in the upper third of the forearm. Here again, erysipelas and gangrene attacked the stump. The patient, however, has recovered, and the stump has now healed.

Case XXIV.—John Garing, private, Co. F, 10th Iowa. This was a gunshot fracture of the left forearm. The patient was wounded at Champion Hills, May 16th. Secondary amputation was performed in the middle third by the double lateral flap operation. This case recovered without accident.

Case XXV.—Charles Schrœder, corporal, Co. I, 127th Illinois.—A gunshot wound of the right foot, received at Vicksburg, May 13th. Secondary amputation was resorted to in the lower third of the limb. Antero-posterior flaps were made, which covered the ends of the bones. These flaps sloughed off twice, and the bones were as often shortened by the saw. The patient, however, is now doing well, and is classed among the convalescents of the hospital. This is another case among those already recorded, proving the insufficiency of the tissues in the lower third of the leg to bear accidents, involving their integrity after amputations. As accidents, such as mortification, erysipelas, retraction of the tissues, &c., are almost sure to occur in military surgery, it is easy to understand why these amputations should be less successful in the army than in private practice.

Case XXVI.—Francis Rossa, private, Co. G, 24th Iowa. This man was wounded May 16th, at the battle of Champion Hills, producing a gunshot fracture of the right forearm. Primary amputation was performed in the upper third of the forearm. Gangrene attacked the soft parts, denuding the bones, making it necessary to amputate the second time. This latter operation was performed by circular operation, August 15th, in the lower third of the arm. Since that time the patient has done well, the wound has healed and the ligatures have come away.

Case XXVII.—Lafayette Jones, private, Co. E, 25th Indiana.—This young man was wounded at Memphis, July 11th, while on patrol duty. He received a gunshot fracture of the tibia in the upper third. An attempt was made to save the limb, but the violence of the inflammation and the extent of the fracture rendered it impossible. Secondary amputation was performed in the lower third of the thigh (the right) by double flap. The tissues united kindly, and the wound has now almost entirely healed.

CASES IN THE JACKSON HOSPITAL, MEMPHIS, TENN.

Case XXVIII.—Matthew Brockway, Co. I, 47th Ohio. Wounded at Vicksburg, June 22d, by the falling of a tree on his leg, producing fractures of the tibia and fibula in the middle third. Amputation was performed on the field the same day, a short distance above the fracture. This case is under treatment, the bones being slightly exposed.

Case XXIX.—Christopher Shafer, Co. D, 7th Illinois Cavalry. Wounded in the knee-joint by a minié-ball, fracturing the bones, and injuring the soft parts. The casualty occurred on the 21st of August last, at Coldwater. The limb was amputated in the Jackson Hospital at Memphis, on the 24th, by Dr. Wasson, in the lower third of the thigh. The case is doing well, and nearly healed.

Case XXX.—David P. Wallis, Co. A, 42d Ohio. This is another gunshot wound in the knee-joint by a minié-ball, producing fracture of the bones, and lacerations of the tissues. It occurred July 11th, at Jackson, Miss. Amputation was performed on the field, in the lower third of the thigh. It is a successful case, the wound having entirely healed. The surgeon performed the circular operation.

Case XXXI.—Peter Heckert, private, Co. E, 120th Ohio. Wounded in the knee-joint by a cannon-ball, fracturing the bones. It occurred July 10th, at Jackson, Miss. Amputation was performed on the field, the day of the accident. The operation was done in the lower third of the thigh. The wound, although not yet entirely healed, is doing well.

Case XXXII.—George Culloner, Co. D, 83d Ohio. A gunshot wound of the ankle, occurring at Champion Hill, May 16th. The joint was very much injured, and amputation was performed on the 4th of June, on board the steamer, while on his way to Memphis. The operation was performed in the middle third of the leg. The wound is not yet entirely healed; the patient is under treatment.

Case XXXIII.—First Lieutenant Frederick Fisher, Co. K, 47th Ohio Infantry, aged 26 years. Wounded at Vicksburg, May 19th. A gunshot wound involving the knee and lower part of the right thigh. Amputation by circular operation was performed May 20th, at the junction of the upper and middle thirds of the limb. The wound in this case did very well, until one day, the patient, in attempting to move on his crutches, slipped and fell. The fall injured the soft parts and uncovered the end of the bone. The wound has now, however, nearly healed again, and the patient is doing very well.

NELATON'S PROBE, WITH CASE.

By F. H. Hamilton, Jr., M.D., A. A. Surgeon, U.S.A.

This excellent little instrument has not been brought into the general use and appreciation to which it is already entitled; indeed, its value was fully declared when on its first trial; and in the person of the illustrious Garibaldi, a problem was solved, which had puzzled the most skilful European surgeons. The records of this hospital show several cases where Nelaton's probe has discovered the presence of lead, and, in one case, of iron, where their existence was never suspected, certainly not known. Thus a grapeshot, weighing 2 oz., was discovered, and removed by Dr. James B. Cutter, from the calf of the leg—the patient previously averring that the ball had gone "clean through." In this case the iron, being rusted, left upon the probe a brownish stain. In the following case the instrument discovered the presence of lead.

M. G., private 7th Connecticut Vols., was admitted with a gunshot wound of the left leg, a short distance above the ankle-joint. His medical attendants upon the field had informed him that the ball had merely glanced across, but had not entered the bone. The patient was firm in his belief that there was no ball in the wound. Three months after the receipt of the injury, when under my care, at the McDougall General Hospital, the wound showed no signs of healing; and this fact, together with the thin, dark-colored discharge, led me to suspect the presence of some foreign body, other than dead bone, notwithstanding the statements of the patient to the contrary. I therefore introduced one of Nelaton's probes, and carefully explored the cavity. Removing the probe, and washing off the blood, I found the presence of lead indicated by several marks on the porcelain. Soon after I enlarged the wound, and, cutting down into the tibia on its outer surface, found a small opening into the bone, where the ball had entered. With some difficulty, I then extracted from the substance of the bone, where it was firmly impacted, an entire minié rifle ball, slightly flattened at its apex. I also removed some pieces of dead bone.

After this the wound proceeded to heal kindly, and was soon entirely closed. Necrosis had already occurred in consequence of the presence of the foreign matter, but by its removal the further extension of the necrosis was prevented. These cases would scarcely, in themselves, be of sufficient importance to merit a special record, were it not that they, as well as any others, serve to illustrate the great value of the instrument. The negative evidence furnished by the probe is often as valuable as the positive, for if, upon a thorough and skilful examination of the wound, we fail in obtaining the evidence of lead or iron upon the probe, we are far more confident in asserting that there is no such foreign substance remaining, than we should be after such an examination with the common gunshot probe.

After withdrawing the probe, the blood, pus, or other matter should be removed, by carefully passing the porcelain ball through a basin of clean water three or four times; when the marks, if there be any, of lead or rusted iron will be left plainly defined upon the surface of the bulb. Of course, these marks should be carefully removed before using the probe again.

It would be well, I think, for each surgeon in the United States service to be furnished with at least two different sizes, one of which ought not to be more than one-eighth of an inch in diameter, and which might be used in searching for buckshot, or in traversing channels made narrow by swelling of the tissues; and the other ought to be about one-quarter of an inch in diameter. This little size, I am satisfied, is large enough for any purpose for which it may be used. If intended for a pocket case, the handle or shaft of the instrument may be made in two pieces, to be screwed together, by which means its length may be increased: or it may be made to fit on to the gunshot probe. If the surgeon prefers, also, the two porcelain balls of different sizes may be fastened upon the opposite ends of the same probe, or upon two probes which may be screwed together, by which the length of the instrument could be doubled at pleasure. When the instrument is kept in a pocket-case it ought always to be protected by a neat, securely fitting leathern or gutta-percha case, such as I have seen made by that ingenious instrument-maker, Mr. Tiemann, of New York.

In my opinion this probe ought to be added to the instruments which the government supplies as an outfit to the army surgeons.

McDougall Gen. Hosp., Nov. 16, 1863.

CHRONIC HEREDITARY CHOREA.

By IRVING W. LYON, M.D,

HOUSE PHYSICIAN, BELLEVUE HOSPITAL.

The writer has been familiar from childhood with a type of chorea so unlike in its *origin* to anything described in our standard text-books, that the publication of a few facts in relation thereto has been thought advisable, not only as a matter of interest to the reader, but more especially for the purpose of eliciting the observations of any who may have met with indications of kindred significance.

The peculiarity of origin claimed for this type consists in its hereditary transmissibility: this claim we will endeavor to support by the following facts and considerations:—

The disease, as we have been accustomed to observe it, is known in the community by the name of *migrims*. Of the origin or derivation of the term but little can be ascertained, except the conjecture that it may be a corruption of megrim, which word, to say the least, is very inexpressive of any leading character of the malady, which is chorea *in toto*, consisting of "irregular action of the voluntary muscles, when stimulated by the will," and marked by an obstinate chronicity.

It is confined almost exclusively to certain families, so that such are popularly denominated the "migrim families;" and the children of parents affected with this disorder are very liable to become the subjects of its manifestations, and in turn transmit it to their offspring. So strong is the conviction of its hereditary influence that the people among whom it occurs believe this to constitute its only legitimate method of propagation, and acting accordingly, have repeatedly been known to interdict marriage alliances between their children and those believed to be tainted with the migrim diathesis, under the severe penalties of disinheritance and social ostracism. It is, however, regarded by many as a disgraceful disease; for what reason it would be difficult to understand, unless we admit the influence of a tradition that ascribes the ultimate origin of the disease to a visitation upon those who reviled and mimicked our Saviour while undergoing crucifixion, that they and their children were ever after affected with choreal irregularities.

Not only do those exempt from the supposed diathesis insist upon its hereditary nature, but even those in whom the disease is manifest are free to admit the same thing, and in one instance a gentleman obligingly volunteered to furnish proof of its existence in his own family for several successive generations.

Aged and very intelligent medical gentlemen, who have practised for the greater part of their professional lives in communities where the so called migrims prevail, testify that they entertain no doubt of its hereditary communicability.

We subjoin the histories of three cases.

Case I.—Mr. A., residing in the town of ——, county of ——, N. Y., has well marked chorea, which is quite general; so that he is constantly, when awake, making irregular movements with the upper and lower extremities, facial muscles, and more or less with those of the body. This condition has existed for many years, but seems not to interfere materially with his general health, the vegetative functions being well performed. Mr. A. has two brothers and three sisters; the two brothers have themselves never had any choreal symptoms, but one of them has two children in whom well defined chorea has existed for many years; of the three sisters, two have had chorea for the most of their lives, being now past the middle age.

The progenitors of Mr. A., on the male side, were perfectly free from chorea, but not so on the maternal side; his mother had well developed choreal manifestations from early life, which continued till her decease; she had also a brother who died during adult life from the severity of the disease; but to go still further, both the grandfather and great-grandfather of Mr. A., on the maternal side, had the same disorder which we find in their children: whether collateral instances of the affection occurred in the families we are not advised.

II.—Mrs. K., of the town of ——, Ct., and a descendant from a family which has long been known and designated as migrim, had chorea for the most of her life, being about seventy-five years old at the date of death. She had a family of two sons and three daughters: of these one son and two daughters had chorea, with which disease they attained an advanced age; no satisfactory information can be readily obtained in relation to the offspring of the son and one of these daughters so affected; but the other daughter married, and had a son, who is now forty years of age, in whom chorea has exhibited itself from puberty.

III.—Mrs. W., formerly a resident of ——, county of ——, N. Y., had chronic chorea, and lived to an advanced age. She stated that her mother was affected with the same disease, together with her mother's father.

To these cases many more might be added, were they deemed necessary to establish the claim premised; let us briefly recapitulate:—

First.—The deep-seated popular belief in the hereditary nature of the disease. Such an argument, it may be urged, is unphilosophical, and popular notions of disease should not be accredited by professional men. But such an objection cannot well be urged here, since the truth of the matter can only be arrived at by observation; and as the symptoms of chorea are patent and easy of cognition to all, we conclude the testimony of any intelligent observer of this disease to be valid and worthy of credence, whether he be educated in the medical profession or not.

Second.—The above reason derives additional support from the acknowledgments of those affected with the disease, for it must be a thorough conviction, that would lead a person to avow a hereditary vice of constitution, which is at once injurious to his reputation and prospects in life; and

Third.—The supposed objections to the first are answered, and it together with the second reason substantiated by the testimony of medical men conversant with the disease. So much for the moral; now for the demonstrative evidence.

We have cited one instance in which chorea was shown to have occurred in a family through five successive generations, and in different persons of the same generation; this is a phenomenon too remarkable to be explained in any other way than the one proposed, and although the first and second cases do not go so far, still they cannot mean anything less than what is claimed for the first case. It may be well to state, in this connexion, that the advantages for investigating the two last cases were not such as would enable us to decide whether the disease could be traced further back or not. . . .

In conclusion, we would again invite the publication of any facts which may assist in elucidating this subject, for it certainly is one of real interest; and as we know that many physicians are daily observing just what has been described, we are confident that some new and acceptable offering will be made from such sources.

Bellevue Hospital, Nov. 17, 1863.

ON A NEW
METHOD OF PERFORMING IRIDECTOMY.

By JULIUS HOMBERGER, M.D.,

NEW YORK.

A great difficulty in performing iridectomy for the purpose of diminishing intra-ocular pressure, consists in the removal of the iris *to its ciliary insertion.* Another necessity, which is also not easily accomplished in many cases, is the excision *of a large piece* of the iris. As it is necessary to go far beyond the margin of a dilated pupil with a lanceolar knife, in order to get a large corneal wound, the danger arises of injuring the lens, which is considerably pressed forward in glaucoma. Again, the instances are not rare where even experienced assistants fail to cut off the iris to the edge, and thus cause a negative result of the operation.

It is not my intention to analyse or to criticise the different modifications which have been invented by Von Graefe, Arlt, Froebelius, Bowman, and others, with a view to do away with these difficulties. No practical eye-surgeon will deny that, in spite of all modern propositions, the execution of iridectomy is still attended by the above-named inconveniences. Therefore, though the method which I am going to describe has not yet stood the test of numerous experiments on living subjects, I do not hesitate to recommend it to the readers of this Journal for further trial, confiding in the easiness of its performance and the certain results which it seems to promise.

With a cataract knife, the point of which, directed towards the centre of the globe, is pushed into the sclerotic at a distance of half a line from the margin of the cornea, a linear opening is made, which, by mere pushing forwards of the knife, is lengthened in a radial direction, until the cut reaches three-quarters of a line beyond the edge of the cornea. During the performance of this cut the back of the knife does not for one moment leave its direction towards the centre of the eyeball. The knife is then gradually withdrawn, so that the aqueous humor is slowly evacuated. By this first act of the operation the anterior chamber is opened, and the iris fissured, from its ciliary insertion, up to a point about half a line distant from its periphery.

The second act of the operation consists in the introduction into the wound of one branch of a fine, but strong pair of scissors, slightly curved laterally. The point of one branch of the scissors is introduced along the posterior surface of the cornea into the anterior chamber, and its cutting edge laid into the angle formed by the junction of the iris and cornea. By one or two movements of the scissors, a wound is produced corresponding with the size of the piece of the iris which is intended to be removed. It will be necessary, in order to introduce the scissors far enough, to enter first but a little way into the wound made by the knife, and to enlarge it by a small, almost rectangular incision.

In the third act, a common iris-forceps is introduced into the anterior chamber, but not in a diagonal direction, as usually. With its points the operator takes hold of that part of the iris next to the angle of the wound, and, by a slight traction (in the direction of a tangent touching the margin of the cornea in the wound), he tears the already fissured iris up to the pupillar margin, and then, by continued pulling, he severs it from its ciliary insertion. As soon as the iris is torn off up to the opposite angle of the corneal wound, the operator himself, or an assistant, removes the separated segment of the iris, with either knife or scissors.

The advantages of this method I wish to condense in the following points, and would be glad if by my proposition of a more convenient way of performing iridectomy I had contributed a mite to the universal diffusion of this important operation.

1. The opening in the anterior chamber is made in such a way that the instruments do not in any way come in contact with the pupillary region, and there is therefore no danger of injuring the lens.

2. The inner edge of the corneal wound is made with much more certainty in the junction of iris and cornea than with either knife or lance.

3. The tearing of the iris from its insertion loses by the previously made fissure of that membrane the danger of an accidental dialysis, while it insures a peripheral pupil with more certainty than if the iris is cut off after having been dragged out in the manner hitherto practised.

4. The cutting off of the iris may be performed by assistants of little experience, because, even if well executed, it does not, as in the usual methods, make it dangerous or even impossible to resume hold of the iris.

Finally, I may be permitted to remark that I do not consider the division of some fibres of the ciliary muscle (Hancock) of great therapeutical importance, but that I think, that the angular opening, which allows a part, at least, of the aqueous humor to escape for some time, is very favorable to a gradual diminution of intra-ocular pressure. The importance of a compressive bandage during the after-treatment, may, by this circumstance, be considerably lessened, or even totally annulled.

24 West 12th St., N. Y., Nov., 1863.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, Dec. 2, 1863.

DR. JAS. ANDERSON, PRESIDENT, IN THE CHAIR.

REVIEW OF UNITED STATES PHARMACOPŒIA.

PRIMARY LIST.—*Continued.*

Dr. E. R. Squibb, of Brooklyn, continued his review of the Pharmacopœia, and first alluded to some articles in the primary list, which he had omitted to mention at the previous meeting.

Alcohol Fortius (stronger alcohol) was introduced as a solvent for iodine and like substances.

Alcohol Dilutum is the stronger alcohol diluted one-half with water.

Aurantii flores is used for making the orange flower water, a useful substitute for the ordinary rose water.

Cadmium is introduced for making the sulphate of that metal.

Caffea (ground coffee) is added on account of its antidotal effect in opium poisoning.

Canna is an addition to the fecula.

Ferri Sulphuretum is introduced for making the sulphureted hydrogen, which is so frequently used as a test.

Leptandra is a remedy for trial. It is an emetico-cathartic, and eclectics contend that it is a substitute for calomel in its action on the lower and upper part of the canal.

Matico is also on trial as an aromatic tonic and stimulant. It possesses no astringent properties.

Nectandra has the properties of being antiperiodic and febrifuge. Its active principle is biberine, and is used in the form of a sulphate; it does not excite the circulation or the nervous system like quinine.

Sodæ Sulphis (sulphite of soda) is introduced as a convenient form of applying sulphurous acid in various cutaneous affections, where the pure acid is too irritating.

Syrupus Fuscus (molasses) is made officinal that it may be written for.

This completes all the new introductions into the primary list.

SECONDARY LIST.

Achillea (yarrow) is an antiperiodic and tonic. On trial.

Angelica is the root of the Angelica Archangelica, and not of the Angelica Atropurpurea.

Berberis (barberry), root of the berberis vulgaris, is a tonic and purgative.

Brayera (kousso) is the celebrated remedy for tape-worm. It is given in powder after a purgative, and while fasting.

Delphinium (larkspur), seed changed for the root.

Euonymus (wahoo), on trial as a diuretic and tonic. It destroys vermin in the hair effectually.

Gelseminium is an indigenous plant, and is said to be an energetic nervous tonic without astringent, nauseating, or purgative properties. There is claimed for it also the property of reducing the force and frequency of the pulse.

Gossypii radix (cotton root) is intended as a substitute for ergot.

Hydrastis possesses energetic tonic properties.

Rottlera (kameela) is a cathartic vermifuge, and may be used in lieu of kousso or pumpkin seed in tape-worm.

Scutellaria (scull cap) is an antispasmodic, and is considered as a specific for chorea. It is used in infusion.

ACETA.—*Acetum Lobeliæ* is a preparation which is the most convenient for preserving the active principles of the plant. The same may be said of *Acetum Sanguinariæ*.

Acetum Opii is changed in formula but not in strength.

ACIDA.—*Acidum Hydriodicum dilutum* is a valuable preparation of iodine when the stomach is irritable. *Acidum Muriaticum dilutum* is introduced for foot-baths, and should always be used fresh. *Acidum Phosphoricum dilutum* is a valuable nervous tonic. *Acidum Sulphurosum* (sulphurous acid diluted with water) is used as an application for the destruction of parasitic growths. *Acidum Valerianicum* is for making the valerianates.

ÆTHERA.—*Æther Fortior* is the pure ether, and *Chloroformum purificatum* the pure chloroform, both of which are used for anæsthetic purposes.

The Academy then adjourned.

NEW YORK COUNTY MEDICAL SOCIETY.

STATED MEETING, December 7, 1863.

MORTALITY OF THE CITY.

THE Committee on Diseases submitted the following report for the past month. The whole number of deaths during the four weeks ending Nov. 16, was 1747, a rather high degree of mortality. The males, as usual in cities, are in excess, being 940 to 807 females. Of the total number 1047 were natives and 676 of foreign birth. But in extraordinary contrast with this item is the fact often alluded to in our report, that while the native population of New York is nearly double the foreign population, yet the death of children of foreign-born parents is more than seven times that of children of American parents. Thus our present figures of this item stand 87 American parented children died to 653 children of foreign parentage. The indefinite heading "Infantile Convulsions" foots up to 103; then come "Dropsy of the Head" and "Infantile Marasmus," 160. How many maladies are lumped together in the inspector's reports, cannot be guessed. The City Inspector lays the blame of such imperfect classification of disease upon the medical profession of the city, who in most cases write their certificates so as to allow more than one diagnosis. But in his list, inflammation of the bowels is a heading by itself, soon followed by that of diarrhœa and dysentery, and the cholera infantum. The deaths from bowel affection number this month 147, a high figure for the season of the year.

Affections of the lungs, or congestion, inflammation, and bronchitis, each of which has a separate heading, are high —140—but not especially so for the season. The deaths from phthisis are above the average, viz. 288. Croup also is more than usually fatal, numbering 106. The past month has been remarkable for obstinate catarrhal affections, which doubtless have produced an effect on the bills of mortality. Virus diseases are unfortunately quite prevalent, 54 deaths are reported from scarlatina, 75 from diphtheria, and 81 from typhus and typhoid fevers. The increase from week to week in diphtheria and typhus is so steady that we seem to be threatened with an epidemic of these maladies during the winter. Measles prevail but moderately, only three being reported, and a like figure from small-pox.

(*To be Concluded.*)

American Medical Times.

SATURDAY, DECEMBER 19, 1863.

FEE AND CONTRACT SYSTEM.

PROFESSIONAL REMUNERATION, perhaps, more vitally interests the mass of American physicians than any other question which can be presented for their consideration. As a people, we are reputed to hold the almighty dollar in profound respect, and as a profession we are not exempt from the national scandal. For the most part we have reduced the practice of physic to a mere matter of business. We measure success by the amount of income, and are strongly inclined to gauge professional excellence by the same standard. The subject of the present article, therefore, possesses peculiar interest, and will doubtless attract the attention of many readers who rarely honor us with a notice.

At the last meeting of the Association for the Promotion of Social Science (England), a communication was read, which advocated the adoption of the contract instead of the fee system by the medical profession. The plan recommended was to dispense with the fee system, and to pay the doctor so much per annum, to include all ordinary work, and a fee to be paid for extraordinary work. Ordinary work was defined to mean periodical visits, attending to the health of the patient, etc.; and extraordinary work was held to be such exceptional services as calls to attend on patients immediately, accidents, and so on. This arrangement, it was considered, would make prevention as well as cure the object of the doctor's care, and assimilate the interests of the physician and patient.

This question has excited a lively discussion in the medical journals, and various are the arguments, pro and con. On the one hand it is alleged that if the physician make a contract of this nature he degrades his calling to the level of the common tradesman; that he is liable to be compelled to an excess of duty by being called when there is no need of his services; that it would lead to dissatisfaction of either patient or physician—of patient, if there was no sickness in the family, and of the physician if there was too much sickness. In favor of this plan it is alleged that it will "prevent many of those disgraceful insinuations which have been brought against medical men of 'creating practice,' of paying unnecessary visits, of perverting hospitalities to the purpose of their profession; and when the guest playing the doctor," "that it would be so far mutually beneficial, that, while the patient would have no hesitation in sending for the medical attendant at the earliest indication of illness, the practitioner would, on the other hand, feel more reserve in exercising his discretion in the payment of visits, the purposes of which could no longer be misunderstood."

The objections which are urged to the contract plan practically have no foundation. It does not degrade the medical attendant any more to have a stipulated price placed upon his annual services in a family before than after that service is rendered. The "time-honored and respected honorarium," so sacred to many, has equal value in both cases. Besides, how frequently does the physician stipulate to attend infirmaries, dispensaries, manufactories, and life insurances for fixed annual salaries. In these instances, so common in the profession of every town, the contract plan is adopted without even the thought of professional degradation. The allegation that it would lead to overwork would not prove true if the contract exempted, as it ought ,all special attendance, as at night, in cases of accident, &c. The arguments in favor of the contract plan are plausible, and deserve to be well weighed. It secures the payment of the services of the physician much more certainly than the fee system. In a far less number of instances we are assured, is the payment withheld under the former than under the latter system. The obligation of the patient may not be any greater morally under one than under the other, but legally he is bound by the contract to make prompt payment. The freedom of the physician to visit the family and prolong his attendance upon the sick is secured by the contract. His visits are not carefully noted, nor is it even intimated to him that his services are not required in a case of convalescence.

But, perhaps, the strongest argument that can be adduced in favor of the contract is, that the physician assumes under it the highest and most dignified functions of his profession. His aim now is to prevent disease; he is now not always called to cure the sick, but he has a higher duty, viz. that of preserving the health. He visits his families as a hygienist; he attends carefully to the conditions which surround the family circle, and corrects any tendency to disease. The dwelling is often examined, and proper ventilation, drainage, &c., secured; the foods are inquired into, and those selected adapted to each member of the family; the clothing is inspected, the right material advised, and the proper style directed. In a word, the physician becomes a house-to-house visitant, advising and directing in all matters pertaining to the health of the occupants. It cannot be doubted that were this system generally adopted the sum of sickness and mortality would be greatly diminished.

The details of the contract plan are made up by the parties themselves. The special sum stipulated must depend upon the size of the family, and the conditions peculiar to each. But there is no reason for making the price less than the sum total of annual fees under the present system. We are informed, on the contrary, by those who have had experience, that it is generally greater.

We have introduced this subject to the attention of the profession as one of considerable importance, and we hope it will be freely discussed. The contract plan is already adopted by some practitioners among us, especially the Germans, and is generally highly approved. If universally adopted, it may prove to be a most beneficial medical reform.

THE WEEK.

The British *Medical Journal* thus notices the meeting at Geneva, Switzerland, for the formation of a system of aid to the wounded in war:—

"The groans of the wounded after the battle of Solferino and of other battles of the last Italian campaign, were heard of with deep sorrow at Geneva as well as elsewhere. So deeply were the Genevese impressed with the miseries attending the wounded, that they resolved to form a society for the purpose of administering relief on future occasions of the kind, on a scale equal to the demand. This society has held a meeting at Geneva to which delegates were invited from all the leading governments in Europe. The invitations were warmly accepted; and England was represented by Inspector-General Rutherford who was officially sent there; Austria sent Dr. Unger; France, MM. de Pieval and Bondier; Prussia, Drs. Lœffler and Housselle; and so on. A series of resolutions were passed to the effect, that committees should be formed in all countries to provide for the health of the army; and that such committees should be in relation with their respective governments; that in time of peace the committees should organize a system under which they would be ready to act in case of war; that during war, the belligerent nations should furnish contingents of volunteer assistants; that the expenses of these assistants should be paid solely by their respective committees; and that they should wear a red cross on a white coat as the badge of their service," etc.

The annual oration before the Academy of Medicine was delivered on Thursday evening, Dec. 10th, at the hall of the University College, by Prof. John W. Draper. The subject was the Influence of History upon the Medical Profession, and it was treated by the distinguished orator with the most consummate ability. His studies of history enabled him to illustrate his subject with many exquisite sketches, and enrich it with philosophical deductions. The audience was large and select, and received the address with great favor.

The condition of the Federal prisoners at Richmond has been greatly improved by the contributions sent from the North. There has also been some action taken by the Rebel authorities. The Rebel Commissary who had subjected the prisoners to starvation was denounced in their Senate in the most unmeasured terms, and has been removed. From Col. Sanderson, formerly of New York, and now a prisoner at Richmond, we have the gratifying assurance that the supplies from the North were faithfully distributed.

Our esteemed correspondent, Dr. Parigot, has met with what turned out to be an amusing "episode de voyage." Travelling through Ohio he was arrested by the Provost-Marshal, and his aids, as *John Morgan*, and his two travelling companions as John Morgan's officers. The Doctor, after considerable trouble, proved his identity.

The Leopoldino-Carolinan Academy.—This body, of which Dr. Carus, of Dresden, is now President, so well known to the scientific world by its important *Acta and Nova Acta*, at the present time numbers 570 members. Of these there are 333 in Germany, 46 in France, 34 in England, 27 in Italy, 5 in Spain, 2 in Portugal, 4 in Hungary, 5 in Denmark, 7 in Sweden, 30 in Russia, 2 in Poland, 16 in Switzerland, 24 in Holland and Belgium, 13 in Asia, 4 in Africa, 20 in America, and 2 in Australia.—*Med. Times and Gazette.*

Reviews.

MANUAL OF INSTRUCTION FOR MILITARY SURGEONS, ON THE EXAMINATION OF RECRUITS AND DISCHARGE OF SOLDIERS. With an Appendix containing the Official Regulations of the Provost-Marshal-General's Bureau, and those for the Formation of the Invalid Corps, etc., etc. Prepared at the request of the U. S. Sanitary Commission, by JOHN ORDRONAUX, M.D., Prof. of Medical Jurisprudence in Columbia College, New York. Van Nostrand, 1863. Pp. 238.

A MANUAL OF INSTRUCTIONS FOR ENLISTING AMD DISCHARGING SOLDIERS. With Special Reference to the Medical Examination of Recruits, and the Detection of Disqualifying and Feigned Diseases. By ROBERTS BARTHOLOW, A.M., M.D., Assistant-Surgeon U. S. Army, Surgeon in Charge of McDougall General Hospital, Prof. of Medical Jurisprudence, Army Medical School. Adopted by the Surgeon-General for Issue to the Medical Officers of the Army. Philadelphia, J. B Lippincott & Co., 1863. Pp. 276.

AT the commencement of this war we had but a single Manual (Henderson's) on the duties of the medical recruiting officer, and that was but the merest synopsis. There has been a demand for a work more comprehensive, and still not so elaborate as to be removed from the class of manuals. Two works almost simultaneously appeared, both of which aimed to supply this deficiency.

The work of Prof. ORDRONAUX was prepared at the request of the U. S. Sanitary Commission, and is brought forward as a contribution to Military Medical Jurisprudence. The author states that "the manual is, for the most part, a free translation of the French code," with however such reconstruction of certain parts, and alterations, as to adapt it to the use of the American profession. The first five chapters are devoted to general considerations, and the remainder to a careful examination of individual diseases. The arrangement of subjects is such as to admit of easy reference. Each individual disease is briefly described, and the special causes are given for exemption or discharge. The work is written in a compact but clear and forcible style, and is a most useful guide to those engaged in recruiting. Prof. O. deserves commendation for his labor in preparing this useful manual. The learning and ability exhibited in its preparation sustain the well earned reputation of the author.

The work of Dr. Bartholow is not so full as that just noticed, nor is there that completeness in the detailed treatment of individual subjects. It is, however, more decidedly an American work, as the author bases his conclusions very much upon statistics gathered in this country. The author has aimed to adapt the manual to the wants of the surgeon, and he has succeeded in his design. The work is divided into four sections, as follows:—1. Real Disqualifications for Military Service; 2. Pretended Disqualifications for Military Service; 3. Enlisting Soldiers; 4. Discharged Soldiers. It closes with a glossary.

We regard these works as very important additions to our military medical literature, and recommend them as safe and valuable guides to those engaged in the army service.

SYNOPSIS OF THE COURSE OF LECTURES ON MATERIA MEDICA AND PHARMACY, delivered in the University of Pennsylvania; with three lectures on the modus operandi of medicines. By JOSEPH CARSON, M.D. Third Edition, Revised. Philadelphia: Blanchard & Lea, 1863. Pp. 244.

THE bulk of this work is a synopsis of the author's annual course of lectures on Materia Medica, and possesses little interest except to his immediate students. In the latter part we find three lectures on the modus operandi of medicines, in which the author brings forward the usual proofs of their action through the nervous system and by absorption.

Correspondence.

RHINOPLASTY IN AMERICA.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—The recent performance of an important operation in the New York Hospital, by Dr. G. Buck, for repairing an extensive injury of the face, has led to our ascertaining the fact, not, we believe, generally known, that *the honor of first performing rhinoplasty in this country* belongs to our respected fellow citizen, Dr. I. P. Batchelder, and it is due to him, as well as to the history of the operation and the credit of American surgery, that it should be placed on record.

We observe that on the list of rhinoplastic operations performed in this country, in Mott's Velpeau, p. 626, vol. 1, Dr. B.'s name is not mentioned. Your readers who may be curious on the subject will find an account of Dr. B.'s case, written by himself, in No. 21 of vol. 1 of the New York *Med. and Surg. Reporter*, edited and published in this city in 1846, by Dr. Clarkson T. Collins, which we republish for their edification.

W. C. B.

NEW YORK, Dec. 15, 1863.

"Early in the month of July, 1828, while riding in a neighboring town (New Hartford, Oneida Co., N.Y.), my eye fell upon a man whose appearance indicated the loss of his nose. I called him to me, and found that such was the fact. After a hasty examination he was informed that a surgical operation might be with some probability of success performed, which would, to a considerable extent, remedy the deformity caused by the privation. The nature of the operation was briefly explained to him. As he seemed to listen to the proposition, he was also told that if after due consideration he should be disposed to have the experiment tried, I would undertake it. Having fully made up his mind, he presented himself on the eighth of that month, and demanded that the operation should be forthwith performed. Both alæ, with the exception of a very small remnant of the right, which stood out from the surface about one-twelfth of an inch, and the whole cartilage of the nose, were gone. A part of the right, and the whole of the left nasal bone, and the anterior extremities of the inferior and middle turbinated bones, and a considerable portion of the septum nasi, had been likewise destroyed. About two years before the sores were completely healed, since which the parts have remained perfectly sound.

Being an intelligent and tolerably well educated man, he entirely comprehended the nature of the operation which was now more fully explained to him in the detail, and declared that he was willing to undergo any amount of suffering consistent with the preservation of life (and even that he was not unwilling to jeopardize, for it had long been a burden to him), which might be necessary for even a partial removal of the deformity which had shut him out from society and blighted all his prospects, present and future, for it had made him a drunkard. The promise made and the pledge exacted, the operation was performed in the following manner:

A piece of paper or pasteboard, which was to serve as a model in size and shape for the nose to be manufactured, was prepared and fitted, and the parts, upon which the new organ was to be engrafted, denuded. What remained of the right ala was nearly all pared away before a proper surface could be formed. On the left, about the same distance from the mesial line as that occupied by the remnant of the right ala just described, a groove of about two lines in width and one in depth was made for the reception of the margin of the flap to be brought down from the forehead. Some calculation was also made respecting the length, direction, and size of the pedicle by which the flap was to be nourished until union with the parts to which it was to be attached was so far perfected as to furnish adequate support; and, for the more certain attainment of that object, it was furthermore designed that the pedicle should include the left angular or frontal artery, whose faint pulsations could be just perceived. It was also intended that the direction of the pedicle should be such that the cicatrix would occupy as nearly as possible the left perpendicular wrinkle, which, like its fellow on the right side, extended down to the root of the nose between the eyebrows. It was moreover determined to take the flap from the left side of the forehead, midway between the left eyebrow and the hairy scalp. The design of this was to have the lower part of the cicatrix that must remain exposed, correspond as nearly as might be with the wrinkle on the opposite side, and its upper portions extending towards the scalp covered by the overhanging foretop. Another reason for taking the flap as above described was that in bringing it down the torsion would be less than if it had been taken from the middle of the forehead. The paper form was now laid upon the forehead, and an incision corresponding in shape, was made all around it except on the side next the nose. In making this incision, due allowance was made for the shrinkage of the flap, which it was thought might follow its entire separation. Although this supposition, based on no experience or information, was altogether gratuitous, yet the result proved that the precaution was not entirely unnecessary, for if it had not been adopted the subsequent contraction might have defeated the end in view; or at least have rendered the result much less satisfactory than it proved to be. The flap was now detached, and as soon as the oozing of blood from it and the denuded surfaces had entirely ceased, the edges of the former were applied to the latter, and there confined by means of five or six sutures, interrupted or twisted according as the one or the other was found to be most convenient. The pins used for the twisted sutures were fine cambric needles curved or straight to suit the place of application, the points were made to penetrate only just so far through as to make room for one or two turns of a thread around them. In the application of the sutures great care was taken not to strangulate the intervening portions of integument, that sloughing and absorption might be avoided. To some of the spaces between the sutures strips of silk cloth thinly spread with the best English adhesive plaster were applied. The lips of the wound on the forehead were now brought as much in contact as possible, and retained by means of sutures and adhesive straps, and we were not a little surprised and gratified to see how much was accomplished in this way, for, when the wound was finally healed, the scar was much less than had been anticipated. The operation was now finished. During the progress of the cure the parts were carefully watched, and caution taken to prevent undue inflammation, and also any accident which might disturb the process of adhesion. The patient, with his hands secured, was directed to spent his nights in an easy chair, while a pupil watched him during sleep, to preclude all chances of accident.

"On the fourth and fifth days from the operation, the sutures were all removed, the process of adhesion having so far advanced that the sticking plasters were exclusively relied on to keep the parts in contact, while the precautions just mentioned were continued until the union was complete. On the twenty-third (fifteen days from the operation), the pedicle was divided at the point near its junction with the forehead, and turned down towards the end of the nose, and the integuments on the left side slit open and turned aside, and that portion of the pedicle which still made a part of the adventitious nose, after having been pared and shaped so as to make a good substitute for the left nasal bone that had been destroyed, was nicely fitted into the slit, and confined there by passing a fine cambric needle through it and the integuments on each side of it. The union by the first intention between them and the interpolated pedicle was soon completed, and the pin removed. On the first of August, every part of the wound was healed, and the cure pronounced complete. Although the organ had somewhat of an unusual appearance, yet the union was so perfect, and the deformity so far removed, that persons doing business with the patient would not have suspected that any operation of the kind had been performed. Even his companions sometimes rallied him, saying that the new nose looked much better than the old one, and that he had been improved in appearance by the change. It will be observed that no provision for a septum was made. The reason of this omission was a sort of *a priori* opinion entertained by the operator that it would prove of little use in supporting the part; but might by its contraction rather draw it down than keep it up; and it is believed that this view has been, to a certain extent, sustained by subsequent experience. It is hardly necessary to add that the patient and his friends were highly delighted with the result. Drs. Pomeroy and Burge, of Utica, Dr. Wells, now of Pompey, and several other medical gentlemen, whose names are not recollected, assisted in the operation.

"In the winter following, another operation was performed for remedying a deformity occasioned by the destruction of the lower lip, incisor teeth, and their alveolar processes; a deformity not much less disgusting, and infinitely more troublesome, as will be readily conceived, than that caused by the loss of the nose. In this case the substitute was taken from the neck, and the cure was completed in fifteen or twenty days.

"I have since performed a considerable number of anaplastic operations of one kind or another, all of which were successful, with the exception of one, which was a total failure. Every step of the operation having been accomplished in the most satisfactory manner, no misgivings as to the result were entertained; but gangrene seized upon the flap. Nearly the whole cheek with the alveolar processes in both jaws on the left side having been destroyed by the too free use of mercury, the little girl, who was only ten or eleven years old (too young, I think, for such a operation), had acquired the habit of thrusting her tongue through the opening, from which it was impossible for her to refrain. To prevent that action, which would inevitably disturb, and in all probability, defeat the success of the operation, a silver plate was accurately fitted inside the vacuity in the jaws, by Mr. Gilbert Foster, a very ingenious and skilful dentist of Utica, and this, with the tender age of the patient, was in my opinion, the cause of failure.

"I should now advise the postponement of such an operation to a more advanced age, when the solids of the body may be supposed to have acquired more stamina. In one other case a partial failure was experienced, owing, as I think, to the attempt having been made to fill the deficiency with integument, which had been subjected to previous inflammation, ulceration, and cicatrization. Although the accident had occurred in early infancy, some twenty-five or thirty years before, and the portion of flesh appeared to be perfectly healthy and sound, nevertheless it contracted, and ultimately gave way to a small extent, which prevented the entire success of the operation to the no small regret of both patient and operator, who learned therefrom a lesson which has been of use to him in subsequent practice, by teaching him in anaplastic operations to avoid as much as possible all such materials for filling deficiencies."

THE BRITISH TREATMENT OF PRISONERS.

[To the Editor of the American Medical Times.]

Sir:—In several late numbers of the Medical Times you have noticed the condition of the Federal prisoners at Richmond. As the London *Lancet* has complacently thanked God that English wars have never been marked by any of the barbarities reported in this country, I desire to call its attention to the following from "*Lossing's Field Book of the Revolution*" These extracts are almost a repetition of the reports from the Southern Prison House. The scene of these barbarities is New York, and the actors the British military authorities in the time of the revolution.

"The 'New Jail' was made a provost prison, where American officers and the most eminent Whigs, who fell into the hands of the British, were confined. Here was the theatre of Cunningham's (provost-marshal) brutal conduct towards the victims of his spite. The prisoners were formally introduced to him, and their name, age, size, and rank were recorded. They were then confined to the gloomy cells, or to the equally loathsome upper chamber, where the highest officials in captivity were so closely crowded together that when, at night, they lay down to sleep upon the hard plank floor, they could change position only by all turning at once, at the words *right—left.* Their food was scanty and of the poorest kind, often that which Cunningham had exchanged at a profit for better food received from their friends or the Commissaries. Little delicacies brought by friends of the captives seldom reached them, and the brutal Cunningham would sometimes devour or destroy such offerings of affection, in the presence of his victims, to gratify his cruel propensities. Thus for many months, gentlemen of fortune and education, who had lived in the enjoyment of the luxuries and the refined pleasures of elegant social life, were doomed to a miserable existence, embittered by the coarse insults of an ignorant, drunken Irish master, or to a speedy death caused by such treatment, the want of food and fresh air. . . . Still greater cruelties were practised upon the less conspicuous prisoners, and many were hanged in the gloom of night without trial or known cause for the foul murder."

"Next to the provost prison, the sugar-house in Liberty street was most noted for the sufferings of captive patriots. . . . Within this gloomy jail the healthy and the sick, white and black, were indiscriminately thrust; and there, during the summer of 1777, many died for want of exercise, cleanliness, and fresh air. 'In the suffocating heat of summer,' says Dunlap, 'I saw every aperture of those strong walls filled with human heads, face above face, seeking a portion of the external air.' At length, in July, 1777, a jail fever was created, and great numbers died. During its prevalence the prisoners were marched out in companies of twenty to breathe the fresh air for half an hour, while those within divided themselves into parties of six each, and then alternately enjoyed the privilege of standing ten minutes at the windows. They had no seats, and their beds of straw were filled with vermin. . . . In messes of six they received their daily food every morning, which generally consisted of mouldy biscuit filled with worms, damaged peas, condemned pork, sour flour and meal, rancid butter, sometimes a little filthy suet, but never any vegetables. . . ."

The condition of the prisoners on board the Jersey prison ship is thus described: "Every morning the prisoners brought up their bedding to be aired, and, after washing the decks, they were allowed to remain above till sunset, when they were ordered below with imprecations, and the savage cry, 'down, rebels, down!' The hatches were then closed, and in serried ranks they lay down to sleep, if possible, in the putrid air and stifling heat, amid the sighs of the acutely distressed and the groans of the dying. Each morning the harsh order came below, '*Rebels, turn out your dead.*'"

Yours, etc.,

T. D.

OPERATION OF BRONCHOTOMY.

(To the Editor of the AMERICAN MEDICAL TIMES.)

SIR:—I notice in the AMERICAN MEDICAL TIMES, No. 21, a tabular statement of cases of bronchotomy. Case 6, œdematous glottis from inhalation of steam, is stated to have been operated upon by DR. PARKER. I was then House-Surgeon, and the operation was performed by myself, at Dr. Parker's request. You will much oblige me by making the correction, and accord that justice in this trifling matter which has been so accurately rendered to my confrères, DRS. NOYES, WEIR, and RAY.

Yours, etc.,

BRADFORD L. B. BAYLIES, M.D.

ASTORIA, L. I., Nov. 28, 1863.

Army Medical Intelligence.

ORDERS, CHANGES, &c.

The following Orders have recently been issued from the War Department:

Assistant-Surgeon Joseph H. Bailey, U.S.A., retired, now on special duty with the Governor of New York, will at once repair to Washington, D. C., for the purpose of settling his accounts. On the completion of this order he will resume his duties.

The telegraphic order of the 5th Inst., from the Surgeon-General's Office (by order of the Secretary of War), directing the Medical Director at Philadelphia, Pa., to relieve Edward Shippen, U.S.V., from duty at South Street Hospital, and order him to report to Assistant Surgeon-General Wood, at Louisville, Ky., for duty in the field, is hereby confirmed.

Leave of absence until further orders, is hereby granted Surgeon John H. Bayne, U.S.V.

Hospital Steward B. F. Bigelow, U.S.A., is hereby honorably discharged the service of the United States, to accept a position in the U.S. navy.

Acting-Assistant-Surgeon F. H. Patton, 12th Virginia Vols., is hereby granted an extension of ten days to the time hereafter allowed by S. O. 528, Nov. 28, 1863, from the War Department.

Surgeon Daniel Meeker, U.S.V., recently released as prisoner of war from Richmond, Va., will report in person to Assistant-Surgeon-General Wood at Louisville, Ky., for assignment to duty. Permission to delay reporting for twenty days is hereby granted him. (Dec. 8, 1863.)

Surgeon Charles E. Swasey, U.S.V., now on duty as Attending-Surgeon to sick and wounded officers at Frederick, Md., will report in person without delay, for duty, to the Commanding General of the Department of the Missouri, and by letter to Assist.-Surgeon-General R. C. Wood, U.S.V., at Louisville, Ky.

Assistant-Surgeon W. H. Park, 49th Ohio Vols., is hereby granted an extension of ten days to the time heretofore allowed him by Special Orders No. 528, Nov. 28, 1863, from the War Department.

Upon the recommendation of a Board of Officers, convened by Special Orders No. 294, July 3, 1863, from this office, the following officers are hereby honorably discharged the service of the United States, on account of physical disability.

Surgeon Jonathan R. Shreve, 90th Pennsylvania Vols.

Lieut.-Col. C. C. Keeney, U.S.A., Medical Inspector, will report in person to the Commanding General of the Department of the Pacific, for duty as Medical Inspector of that Department.

Assistant-Surgeon William M. Notson, U.S.A., now on sick leave, is hereby relieved from duty with the Army of the Potomac, and will report in person, without delay, to the Surgeon-General of the United States Army, for orders.

Leave of absence, for twenty days, on Surgeon's certificate of disablity, is hereby granted to Surgeon Enoch Pearce, U.S.V.

The leave of absence granted Surgeon James T. Reeve, 21st Wisconsin Vols., in Special Orders No. 528, Nov. 28, 1863, from the War Department, is hereby extended ten days.

Medical Cadet Joseph R. Draper, U.S.A., is hereby honorably discharged the service of the United States, to accept an appointment as Assist.-Surgeon, 14th Regiment Rhode Island Heavy Artillery (colored).

By direction of the President, the following named Medical Officers are hereby discharged the service of the United States, for incompetency:—Assist.-Surgeon William Wescott, 17th Maine Vols.; Assist.-Surgeon W. H. Jewett, 3d Maine Vols.

Assistant-Surgeon C. O. Wright, 85th Ohio Vols., and Act.-Assistant-Surgeon W. S. Hosack, 78th Pennsylvania Vols., recently released as prisoners of war from Richmond, Va., will join their regiments. Permission to delay reporting for twenty days is hereby granted them.

The telegraphic order from the War Department, dated Dec. 4, 1863, granting Surgeon J. Simpson, Medical Director at Baltimore, Md., permission to visit Washington, is hereby confirmed.

The Secretary of War has decided, on the recommendation of Colonel E. D. Townsend, approved by Major-General Halleck, that Hospital Stewarts are entitled to the same bounty ($402) as other recruits for the Regular Army.

The new Hospital at Presidio de San Francisco, California, has been announced as a General Hospital. Surgeon John O. Bronson, U.S.V., has been placed in charge.

Surgeon John G. F. Holston, U.S.V., has been assigned to duty as Medical Inspector of Hospitals at Memphis, Tenn.

Assistant-Surgeon Charles H. Hood, U.S.V., is on duty in charge of Contrabands in Hospitals and Camps, at Murfreesboro', Tenn.

Surgeon Edward McDonnell, U.S.V., has been assigned to duty as Surgeon-in-Chief, District of Baton Rouge, La.

Surgeon Henry S. Hewit, U.S.V., is on Surgical duty in the Hospitals at Chattanooga, Tenn.

Surgeon Frederick Lloyd, U.S.V., to duty in charge of Jefferson Hospital, Memphis, Tenn.

Assistant Surgeon J. C. Norton, U.S.V., to duty connected with the transportation of sick and wounded men from Kelly's Ferry, Tenn., to Bridgeport, Ala.

Assistant-Surgeon A. B. Chapin, U.S.V., to duty as Executive Officer, General Hospital, Annapolis Junction, Md.

Surgeon S. B. Davis, U.S.V., has been relieved from General Hospital, Leavenworth city, Kansas, and assigned to duty as Medical Director S. W. Missouri, at Springfield, Mo.

Assistant-Surgeon J. W. Leete, U.S.V., and Act.-Assist.-Surgeon H. M' Drach, have accompanied the 3d Maryland Cavalry to New Orleans, La'

Assistant-Surgeon James Chapman, 90th New York Vols., is hereby honorably discharged and mustered out of the service of the United States, to date April 21, 1863, he having been appointed Surgeon of the 123d New York Vols.

So much of General Orders No. 38, October 30, 1863, from Head Quarters, Department of the Pacific, as dismissed Assistant-Surgeon Robert Parker, 4th California Volunteers, for violation of the 9th, 45th, and 83d Articles of War, and for conduct prejudicial to good order and military discipline, is hereby confirmed by the President of the United States.

Leave of absence for ten days has been granted to Surgeon W. O. Baldwin, 2d D. C. Volunteers.

Surgeon James Bryan, U.S.V., is hereby relieved from duty in the Army of the Tennessee, and will repair to New York city as Examining Surgeon for Volunteer recruits at that place.

Surgeon James D. Strawbridge, U.S.V., is hereby relieved from duty in the Army of the Tennessee, and will at once enter upon the duties of Examing Surgeon of Volunteer recruits at Philadelphia, Pa.

They will at once report by letter to the Provost Marshal General of the United States for instructions.

By direction of the President, the following Officer is hereby dismissed the service of the United States:—

Surgeon J. E. Quidor, U.S.V., for conduct unbecoming an officer and a gentleman, to date November 30th, 1863.

Medical News.

Prof. Armsly, of Albany, N. Y., recently applied a ligature successfully to the subclavian artery.

Dr. P. G. Fore, of Cincinnati, has gone to Europe for his health.

Ice in Sea-Sickness.—Ice is recommended as a sure remedy as well as a prophylactic against sea-sickness. A traveller states that he has tried it himself with success, and that if the stewards of steamers would keep a supply of lemon water ices on board, they would profit themselves and render great service to their passengers.—*Phil. Med. Reporter.*

A memorial has been presented to the Trustees of the Free City Hospital, in behalf of about eight hundred citizens of Boston, of all professions, asking that a part of the Hospital may be devoted to the practice of homœopathy.

The Vaccinator.—This is the name of a new instrument which Mr. W. J. M. Gordon, of Cincinnati, is introducing to the notice of the profession. Quite a number of our physicians have tried it, and every one is greatly pleased with the ingenious instrument. It is constructed as an ordinary spring lancet, except that the blade terminates in a tubal point.

Medical Schools.—Everywhere, so far as we hear, the medical schools of our country are entering upon a prosperous winter. In this city there is an unusually large number of students already in attendance. The amphitheatre of the Commercial Hospital is crowded at all the cliniques. There are between four and five hundred students at each of the old schools of Philadelphia, and we have a like report from the schools at New York city. The Bellevue Hospital Medical College will, we learn, have a class of about three hundred, which is a fine compliment to the energy of this young institution.—*Cin. Lancet & Obs.*

Belladonna and Sulphate of Zinc in Whooping Cough.—M. Garraway contributes to the *London Lancet* his experience with belladonna and sulphate of zinc in the treatment of whooping cough in fifty cases. He reports most excellent results, the cough being brought under control or entirely arrested in periods varying from one to three weeks. His mode of administering these remedies is thus described:—"The mode of administering the belladonna was in the form of extract, either diffused in water with the sulphate of zinc and sufficient syrup to make it agreeable to young children, or to those who were old enough and preferred it in the form of pills—the dose being from one-sixth to one-fourth of a grain of the extract, and one-half to a grain of the zinc, three or four times a day, steadily increasing the amount, till at the end of three weeks children of five or six years old would be taking from four to six grains of belladonna, and twice that quantity of sulphate of zinc, daily."—*Lancet & Obs.*

Berkshire Medical College Commencement.—The Berkshire Medical Institution had its annual commencement in November. The Diplomas were awarded to the graduates by the venerable President, Dr. H. H. Childs, and delivered by the Dean, Prof. Greene. We give the names, residences, and subjects of these:—

Kirk H. Bancroft, Lowell, Pneumonia; Maurice K. Bennett, Burlington, Ct., Gonorrhœa; Charles F. Couch, Pittsfield, Etiology; A. P. Folsom, Oldtown, Me., Exercise; Wm. H. Graves, New Mulford, Ct., Death; Wm. H. Gray, Acton, Scorbutus; E. W. Loveland, South Hartford, N. Y., Importance of a correct Diagnosis; J. F. Niver, Cedar Hill, N. Y, Fractures; C. A. Osborn, Oneida Lake, N. Y., Puerperal Fever; Ralph Sherwood, Fairfield, Vt., Intra-Capsular Fracture Cervix Femoris; David Stephens, Addison, N. Y., Shock; R. S. Turner, Morristown, N. Y., the Human Skin; Frank Whitman, Bernardston, Coxalgia; J. J. Woodbury, North Dana, Dyspepsia; J. K. Draper, U.S.A., Quinia; B. H. Gaskill, Pancoastborough, Ohio, Physiology of Circulation.

Dr. Childs addressed the class with much feeling, complimenting them upon the high rank that they had taken as professional scholars, and invoked the Divine blessing on their future course. The Honorary Degree of M.D. was conferred upon Drs. M. A. Patterson of Michigan, and Jonathan Brown of Massachusetts. The commencement address was given by Dr. Pliny Earle, Professor of Materia Medica, Hygiene and Psychological Medicine. The address was upon the importance of teaching the latter branch of his professorship in American Medical Schools, where it seems to have been strangely neglected—the Berkshire College having been the first, and thus far the only institution to establish a chair for instruction in this, which Prof. Earle justly styled the noblest branch of medical science—that which treats of diseases of the mind. In Europe, it was remarked, it is carefully taught. Prof. Earle treated his subject with the earnestness of an enthusiast, with the feeling of a philanthropist, and with all the ability of a strong and logical mind, thoroughly informed upon the subject discussed. There were no tricks of oratory about the address, but we have rarely followed a speaker with so deep and sustained interest to the close of his remarks. We hope that Prof. Earle will long continue to be connected with our home college.

Dr. Childs read the following resolution passed by the trustees, concerning the death of Mr. I. W. Doten, of the graduating class:—

"*Resolved*, That the Trustees, impressed with a sense of the worth of Mr. I. W. Doten as a Medical Student of great promise, regret that his removal by death just before graduating, has prevented them from conferring the Degree of M.D. this day, which we should have done with great pleasure."

The alumni anniversary occurred on the previous evening, when a very able oration was delivered by Dr. Noah Cressey of Canaan Center, N. Y., followed by addresses from Professors Childs, Chadburne, Seymour, and Greene, and Drs. T. K. and Oscar De Wolfe.

The present Faculty of Medicine is constituted as follows:—Henry H. Childs, M.D., President; Wm. Warren Greene, M.D., Dean; Henry H. Childs, M.D., Emeritus Professor of the Theory and Practice of Medicine; Timothy Childs, M.D., Professor of Military Surgery; Corydon L. Ford, M.D., Professor of Anatomy and Physiology; William P. Seymour, M.D., Professor of Obstetrics and Diseases of Women and Children; Wm. Warren Greene, M.D., Prof. of Principles and Practice of Surgery and Clinical Surgery; Paul A. Chadbourne, M.D., Professor of Chemistry and Natural History; Alonzo B. Palmer, M.D., Professor of Pathology and Practice of Medicine; Pliny Earle, M.D., Professor of Materia Medica, Hygiene and Psychological Medicine; E. B. Lyon, M.D., Demonstrator of Anatomy and Prosector of Surgery; A. J Bigelow, Prosector to the Prof. of Military Surgery; Edward H. Sexton, A.M., Clerk of Clinique.

Original Lectures.

REMARKS—ON A NEW INSTRUMENT FOR LARYNGOSCOPY, RHINOSCOPY, AND FOR OPERATIONS IN THE ORAL CAVITY.

By LOUIS ELSBERG, M.D.,

LECTURER ON DISEASES OF THE LARYNX AND THROAT IN THE UNIVERSITY OF NEW YORK.

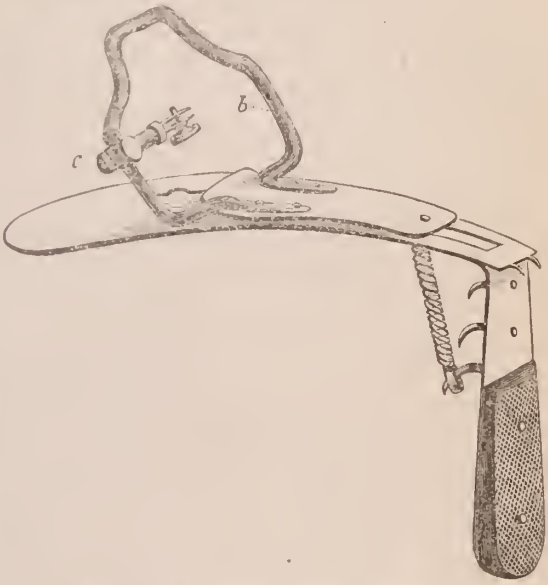
(Read before the New York County Medical Society, Nov. 2d, 1863.)

I DESIRE to bring to your notice a new instrument, a tongue spatula, or rather speculum faucium, and to demonstrate its use for laryngoscopy and rhinoscopy, as well as in operations in the oral cavity. The tongue spatula is one of the unfortunate surgical instruments which almost everybody who has used them to any great extent, has found fault with, and modified. Without an attempt at exhaustive research, I have gained from various sources information of over fifty different kinds; and of the majority of these I can truly say that an ordinary spoon-handle serves the purpose just as well, if not better. Not going further back than to within the last twenty years, I have found that the publication of Green's "Treatise on the Diseases of the Air Passages," in 1846, in which it was claimed that a sponge-armed probang could be thrust at will into the interior of the living larynx, gave quite an impulse to the endeavors to construct a suitable instrument with which the tongue might be so much depressed, and at the same time drawn forward, as to reveal the upper edge of the epiglottis. Before the impetus thus given had subsided, the introduction of the laryngoscope by Czermak, in 1858, offered another and still stronger inducement to devise a proper tongue-spatula. The names that have been applied to it have varied, according to the modesty or fancy of the inventor or modifier, from the dignified and much promising one, "Speculum," or even "Laryngoscope," to the simple but truthful one, "Depressor." To render an account of all the various kinds proposed, would be a difficult and unprofitable, even were it a possible, task.

It is desirable to have some means of assisting the patient in keeping his mouth open; 2. To hollow out the oral cavity posteriorly, and press the tongue forward and upon the very floor of the mouth without depressing its attachments with the larynx; 3. To have the blade for the tongue adjustable at different lengths; 4. To have some arrangement attached to hold the mirror in operations in the interior of the larynx, or the palate-hook in rhinoscopic investigations, etc. On the other hand, it is undesirable to force or keep the patient's mouth open by main strength; 2. Either to let the tongue slip over on the sides of the instrument, or rise back, and thus obscure vision and interfere with instruments in operations on the tonsils, uvula, in the pharyngo-nasal space or larynx,—or to pull on, constrain, or press upon it, so as to give the patient pain; and finally, it is undesirable to have the apparatus a complicated one.

A tongue-spatula with all the good qualities to be found in others, and possessing the desirable features without the objectionable ones just mentioned, is certainly a great desideratum. And, in presenting to you an instrument which I believe to supply such as I want, I wish you particularly to notice the points in which it differs from those hitherto in use.

A somewhat ladle-handled curved metallic blade, six and a half inches long, on its lower surface a little hollowed out laterally and roughened—with a handle, partly of metal and partly of hard rubber, attached at right angles, constitutes the tongue-piece. Two inches from the rounded free end of the blade an opening commences which is two inches long, and in which easily slides a button carrying a strip of metal, which plays flat upon the blade, and may also in any position be raised to an angle of at least 45°. Two upright-bent wires, constituting the mouth-keeper, covered above with india-rubber tubing, are firmly attached to the nearer end of this metallic strip, at an angle of about 130°, so that, on elevating the further extremity, the wires lie flat upon the blade and vice versa; to this extremity there is fastened either a band of india-rubber webbing, or a spiral spring. If the webbing is to be used exclusively, nothing but two or three strong pins, inclined downwards, projecting from the junction of the tongue-blade and handle, are needed to fasten it; while a longitudinal opening, commencing at this junction and extending two inches upon the blade, and hooks projecting from the inner side of the handle, are used to secure the spiral spring. I have had instruments with both arrangements constructed, and in the spatula represented in the cut, either the webbing or the spring may be employed. Attached to one of the upright wires is a little fork (of which a glance at the figure gives a better idea than verbal description might convey) intended to hold between its fangs the handle of a mirror-hook, or any other instrument desired to retain in the oral cavity.*



In the first place you will observe it is very simple in its construction;† the manner of its use is obvious on inspection. Next, you see that the blade for the tongue can be lengthened and shortened; its shape is that proposed by Czermak, which experience has shown to be best suited for its purpose; and sufficient power can be exerted with it to smoothe down muscles rebelliously inclined. Then, the mouth-keeper does not, in spite of the patient, force the mouth open, but assists him in keeping it so—supporting the parts in that position so as to give some rest to the muscles which would otherwise have to be constantly exerted. On strongly calling the will into antagonistic action, the patient can shut his mouth almost completely, and this very consciousness in great part overcomes the instinctive opposition to the touch of instruments in the fauces. As soon as his will relaxes, the instrument by its elastic spring-power tends to keep the mouth open again. The width of the mouthkeeper is altered with the utmost ease by simply pressing the wires nearer together, or stretching them further apart, while a new piece of india-rubber tubing may as easily be slided over them for every new patient. The laryngoscope (palate-hook, etc.) holder conveniently fixates an instrument in any position, and allows it to be easily and quickly removed and replaced, so that the operator may have both hands free. Finally, the tongue blade can easily be freed from the mouthkeeper and mirror-holder, and used also alone like the common tongue-spatula; or the mouthkeeper can also be used alone, or together only with the mirror-holder (which I frequently do, letting the patient hold his tongue, horizontally protruded, with his own fingers, gloved or guarded with a handkerchief or towel) so that the apparatus is really adapted to many different ways of employment, despite its simplicity of arrangement.

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* The instrument is made by Geo. Tiemann & Co., 63 Chatham street.

† The wood-cut makes it appear much more complicated than it really is, on account of representing in one both its forms.

When carefully introduced I have found (and, indeed, with some surprise) that patients have well borne this instrument whose throats are excessively sensitive. Certainly, in all cases where the mouth has to be kept open any considerable length of time—whether for purposes of examination or operation, and whatever portion of the oral cavity, fauces, pharyngo-nasal space, larynx, or of any organ that can be reached from the mouth, is involved—the advantages it offers must at once strike every practical mind.

To apply it, push the mouth-keeper as far forward upon the spatula, and make it lie as flatly upon it as possible; be careful to introduce it well into the mouth, and to have the tongue properly under it; direct the patient to open the mouth as far as may be required for the particular object of the application; advance the spatula towards the base of the tongue, and fasten the spring or india-rubber webbing.

Both in applying instruments, and in all laryngoscopic examinations, the patient's attention must be specially called to his constantly exerting his will forcibly to protrude his tongue; the holding alone is else not sufficient.

Properly placed, and with a sufficient amount of natural or artificial light—with or without concentration—entering the oral cavity, this apparatus brings the whole of the fauces more thoroughly into view, on direct inspection, than any other instrument, or combination of instruments, of which I have any knowledge. *It freely reveals, in the majority of cases, at the first sitting, the whole anterior surface of the epiglottis.* For indirect or mediate inspection a little mirror, such as I here present, is needed in addition. This constitutes the laryngoscope. When it is duly held against the uvula—having been previously warmed, to prevent its tarnishing from the breath—the larynx, trachea, and bifurcation of the latter into the right and left bronchi are distinctly seen. With the further addition of a little hook (such as I here show you) to hold, as occasion requires, the uvula and soft palate out of the way, the apparatus reveals, on mediate inspection in the same little mirror—previously warmed as before, and now turned upwards—the posterior surface of the velum and upper posterior wall of the pharynx, the orifices of the Eustachian tubes, and Rosenmüller's fossa, the posterior nasal septum and nares, the turbinated bone and turbinated processes of the ethmoid bone, in short, the whole pharyngo-nasal space (bounded on the sides by the pterygoid processes of the sphenoid bone; in front by the nasal fossæ, above by the body of the sphenoid bone, and behind by the basilar portion of the occipital bone and upper cervical vertebræ), under favorable circumstances, to the covering mucous membrane of the nasal bones, and of the plate of the ethmoid. If, instead of the palate-hook, we add to our little mirror and other apparatus a forceps, such as I here present, we have the outfit for œsophagoscopy. This renders the dilatation of the œsophagus necessary, and although I have experimented on two or three individuals for this purpose, I have not yet succeeded in obtaining a good view into the œsophagus, except at its commencement. That œsophagoscopy can be accomplished, however, even if but to a limited extent, has been proved by the practice of Lewin in Berlin, and Semeleder in Vienna.

And now I shall proceed to demonstrate the application of my speculum faucium, and with it the laryngoscopal and rhinoscopal methods, upon some of the gentlemen present.

Original Communications.

GLYCOGENIC FUNCTION OF THE LIVER,

By HOWARD TOWNSEND, M.D.,

PROFESSOR OF PHYSIOLOGY, ALBANY MEDICAL COLLEGE.

Some months ago we sent to you an account, which you published, of an experiment performed to detect the glycogene in the liver of a man who died five or six hours after having been injured by a railway accident, having been, up to the moment of the accident, in robust health, but in which case we were unsuccessful in discovering any liver sugar, or even glycogene.

Having again performed a similar experiment, wherein the success has been decided, and now, like Archimedes, being able to exclaim "Eureka!" we have thought a brief account of it might not be uninteresting.

There has lately occurred a terrible affray in a bar-room in our city between two desperate characters, resulting in the death of one of the combatants, who was shot through the heart by a ball from a pistol in the hand of his opponent.

The man, who died almost instantaneously, was in his physique like a Hercules, some 35 years old, and a magnificent specimen of robust health and strength, and, as with most of his fraternity—coming from a class commonly called *roughs*—he drank deeply, and intoxication was one of the exciting causes of this fatal quarrel.

The autopsy at the coroner's inquest was performed by Dr. Swinburne, of this city, aided by Dr. Barker, Prof. of Chemistry in the Albany Medical College, to whom we are indebted for the specimens of the lungs and liver used in the demonstration before the class.

We took a portion of the liver (which, by the way, gave a strong odor of alcohol), and, having chopped it into a pultaceous mass and thoroughly washed it, in order to remove all the blood possible, we boiled it, to coagulate the albumen and to concentrate the liver juice; then, throwing the mass upon a filter, we allowed the fluid passing through to filter again through animal charcoal, when it came out a clear, opaline fluid, pure liver juice. This juice was boiled in a test tube over a Bunsen's lamp, having previously thrown into the juice a few drops of the *cupro-potassique test*, which is as follows:—

2 parts saturated solution of sulphate of copper,
3 " glycerine,
4 " solid caustic potash,

when immediately the rich blue color of the test was changed to a reddish fawn-color, because of the liver juice containing sugar, which, having a powerful affinity for oxygen, took from the deutoxide of copper one of its equivalents of oxygen and threw it down as a protoxide, giving the characteristic red fawn-colored deposit.

Had there been no sugar in the liver juice the color would have remained blue, as it did when we applied this same test to the juice extracted from the lung of the same man. Here no change took place, for there was no sugar to deoxydate the deutoxide of copper of the test.

This same result was obtained by Trommer's and the other more common tests, but Kletzinski's is so delicate that it is quite unnecessary to resort to any other.

Such was the result of the experiment not only in the lecture-room before the class, but also again in the laboratory when the experiment was conducted by Prof. Barker, which result was exceedingly satisfactory, for all too well know, who have investigated this glycogenic function of the liver, how rare a thing it is to detect the sugar in the *human* liver, while it is the common sequence of an examination of the liver of animals. Not but what it is produced in the human liver just as it in the liver of animals, —but in our investigations with the human liver we very rarely have the opportunity to operate upon one in a healthy condition—as we have had in this case just quoted—consequently sugar is rarely found in the human liver, or to quote Bernard's own words (and as he is the discoverer of the glycogenic function of the liver, we must certainly admit him to be authority): "As to the presence of sugar in the *liver of man*, it is evident that in the greatest number of cases where it has been sought after, *it was impossible to detect it.*" (Leçons de Physiologie, pp. 182.) And, again, in the same work, he says: "During severe maladies, particularly acute ones, the nutritive functions are seriously impaired, the function of the liver ceases, the liver *producing no more sugar.*" Therefore this has been an exceedingly satisfactory experiment, and we may add a conclusive one—though Dr. Pavy, one of Bernard's former pupils, now of Guy's hospital, London, would doubtless differ from us in this conclusion, or at least the deductions from the excellent and most interesting work on diabetes, which Dr. Pavy has lately published, seem to be adverse to Bernard's logical deductions and admirable views in reference to this glycogenic function of the liver.

Though the term Glucose is used for the liver sugar, it is scarcely necessary for us to state that, notwithstanding the latter closely resembles glucose, it is not *identical*. It is a sugar of animal origin, common to all species yet known, and is distinguished from all other sugars by the readiness of its decomposition in the blood. It originates in the tissue of the liver, and is produced by the transformation of another peculiar substance, which is found anteriorly; which substance is in itself produced in the tissue of the liver, and is termed glycogene—from two Greek words, meaning sugar-producing.

The ultimate composition of which, according to Pelouze, is $C_{12}H_{12}O_{12}$, which is easily converted into sugar by any of the animal ferments, like that contained in the saliva—ptyalin—or those found in the blood. By these this glycogene is converted into sugar by a catalytic process similar to that which would transform starch under like conditions.

This production of liver sugar is during health a constant process. It is absorbed by the blood from the tissue of the liver, and disappears very soon after entering the circulation, ordinarily not found even in the lung tissue. The precise nature of the changes which it undergoes after entering the vascular system is not known, but according to Lehmann and Robin, it is at first converted into lactic acid ($C_6H_6O_6$), which decomposes the alkaline carbonates of the blood, setting free carbonic acid, and forming lactates of soda and potassa, consequently aiding materially in the respiratory process.

This theory of the glycogenic function of the liver is now so well known, that it is scarcely necessary to attract attention in this manner to it, but we have been tempted to send you this account of our successful experiment, because of the great rarity of detecting sugar or even glycogene in the *human* liver, from the reasons already stated. Though an eye-witness of many of Bernard's experiments "*faites au Collége de France*," it was never our good fortune there to see the sugar extracted from the *human* liver.

A NEEDLE SWALLOWED,

AND MAKING ITS WAY THROUGH THE WALLS OF THE ABDOMEN.

By FREDERICK D. LENTE, M.D.

SURGEON TO "WEST POINT FOUNDRY."

I was called to a little girl, about seven years of age, a few days ago, under the following circumstances: Five months ago, during the month of July, she said to her mother that she had swallowed a pin; but, as no unpleasant symptoms supervened, the occurrence was soon forgotten, and nothing more was heard of the pin until a few days ago, when she complained that, on stooping down, something pricked her in the belly; and upon feeling with her fingers she discovered what she supposed to be the forgotten pin; upon examining the spot, which was a few inches below the umbilicus, after some manipulation I managed to get the two ends of the substance between two fingers, and, on pressing one end outwards forcibly, the point of what proved to be a needle an inch and a half in length projected through the skin, and was drawn out by a pair of forceps. It was blackened and very brittle. No unpleasant consequences have resulted. In connexion with this case I would call attention to No. 67 of the Pathological Museum of the New York Hospital; a boy's heart, the *septum ventriculorum* of which is transfixed by a needle. It appears not to have produced any serious consequences. The boy died of a wound of the subclavian artery. I knew an old gentleman some years ago, who was engaged in a large mercantile business. He suffered for twenty or thirty years with "neuralgic pains," so they were called, in different parts of the body, for which but little relief was obtained, and from which his constitution suffered very much. One day, while writing in a private room of his establishment, and rubbing his knee, which was, at the time, the seat of one of his neuralgic attacks, suddenly, to his great surprise, the point of a needle popped out of the skin. Before endeavoring to pull it out, he called in some of his clerks to witness the phenomenon. He never afterwards suffered from any of his former attacks; and, at the time I saw him, enjoyed good health.

Coldspring, Nov. 19, 1863.

PERMANGANATE OF POTASH IN HOSPITAL GANGRENE.

By F. HINKLE, M.D., A. A. Surg., U.S.A.

JARVIS GEN. HOSPITAL, BALTIMORE, MD.

I most respectfully subjoin another case of gangrene treated since my last report was made, which still more fully confirms the efficiency of this valuable and unprecedented remedial agent in the disease.

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William Riley, Oct. 20th, private Co. B, 1st N. J. Artillery, received an extensive shell wound of the thigh at the battle of Gettysburg, July 2d, 1863. He was admitted into this hospital July 16th, 1863. His wound progressed favorably until the middle of August, when ulcerative gangrene made its appearance. The whole wound in two days' time was one frightful mass of disease. Solution of the continuity advanced every hour, leaving a wound ten inches long and four in width, commencing just above the trochanter major of the right thigh, and extending backwards and down the external surface of the thigh, exposing the gluteus maximus, vastus, externus, etc., freely; the bone itself was very nearly exposed below the trochanter major. He was treated with tonics, quinia locally; the nitric acid was applied, with charcoal and yeast poultices, for more than eight days. He was one of the first patients taken with it, and the liq. potass. permanganatis was not then used in this hospital. I solicited the surgeon in charge to make special requisition for it. It was furnished by our medical purveyor Surgeon Cox, with great dispatch. The disease had hitherto resisted the use of the nitric acid and nitrate of silver, yeast poultices, &c. Patient's sufferings were very intense; system perfectly prostrated; countenance very anxious and very pale. In addition to his wound, the patient, when admitted, was suffering with chronic diarrhœa, and is now troubled with the same. He was ordered liq. potass. permanganatis ℥ ss., aquæ Oj., wash the wound every three hours, and dress with lint soaked in the same. The pure liq. potass. permanganatis was applied with a hair pencil every two hours, and as the case improved applied less frequently, so that, finally, once or twice the strong wash was only applied. Continued the tonics and diarrhœa medicines. In two days' time the disease yielded, and four days after the gangrene was freed from the entire wound, leaving a bright red granulating surface, with deep cavities here and there extending in between the muscles. The weak wash was now continued as a simple dressing, and in the early part of November he was able to walk about, his general health also greatly improved. November 2.—The patient has been indulging in the free use of stimulants for the last three days, having gone out on a pass abusing it. This date (Nov. 28th) he was attacked the second time with gangrene. The newly cicatrized wound now presented a dark liver-like appearance, and in twenty-four hours the whole extent of the wound ulcerated as rapidly as though it were melted out with a white hot iron. The strong solution of permanganate of potassa, with constant dressings of the weak wash, was used.

It was again arrested as before, and now, this ninth day of December, is entirely free of all disease; wound is granulating, and cicatrization is going on rapidly.

F. Hinkle,
Act. Assist. Surgeon.

OSSEOUS TUMOR OF THE UTERUS.

By J. N. DANFORTH, M.D.

GREENFIELD, N. H.

In making a post-mortem examination some weeks ago, I came across a very curious osseous growth, connected with the uterus. The tumor is of an irregular ovoid shape, measuring two inches in length, and three and one-half inches in circumference, at its largest part. It is inclosed in a firm fibrous capsule, and is attached to the posterior surface of the uterus, half an inch below the fundus uteri, by a short, but exceedingly strong fibrous pedicle. In structure it is exceedingly dense and hard, and appears to be nothing more than an ill-shaped mass of bony tissue. The uterine appendages and body of the uterus are in a perfectly healthy condition; the cervix is slightly enlarged and indurated.

The patient from whom the specimen was taken, died of acute peritonitis, after a short illness. She was upwards of sixty years of age, and had long been noted for her activity, and capacity for "work." In early life she was somewhat troubled with uterine "weakness"—as it was then called—but for many years this had entirely ceased, since which she has had no uterine symptoms whatever. Although for many years married, and in vigorous health, she never became pregnant. The tumor has every appearance of an old growth, and has probably been connected with the uterus for years. It evidently had no part in the causation of the peritonitis, as that could be clearly traced to over-exertion and exposure. It is difficult to understand how a bony growth, of equal size and weight with the uterus itself, could be thus attached to the organ, without causing displacement thereof, and consequent pain and ill health, especially in a person of more than usually active habits. The case is, it seems to me, in all respects a very singular departure from the laws of pathology, not only as to its causes, but as to its resultsl.

Nov. 18th, 1863.

The Medical Inspector-General of the Belgian army, M. Vleminckx, has issued a circular to all the army surgeons, informing them that in consequence of the proved efficacy of "*rational hydrotherapie*" in a variety of diseased conditions, he considers the time has arrived for its formal introduction amongst the avowed therapeutical agencies at their command. He therefore induced the Minister of War to send an army surgeon of high repute to thoroughly investigate the matter at M. Fleury's establishment at Schwalbein; and consequent upon his report it has been determined to establish a hydrotherapeutical department at the Brussels Military Hospital, and to accept M. Fleury's offer to superintend the introduction of the method, and illustrate its application by a course of clinical lectures, to commence in November.

American Medical Times.

SATURDAY, DECEMBER 26, 1863.

1863.

The closing number of the year suggests a brief review and record of its medical events. They are not numerous or very important, but still they deserve a passing reference.

The meeting of the American Medical Association was perhaps the most important event in civil life. For two years no meeting had been held, and there was danger that professional interest would gradually be diverted from this growing and already powerful organization. But the late meeting was one of unusual interest, and proved that in the future this great national society is to exercise a controlling influence upon the profession in this country. The next annual meeting, to be held in New York city, under the Presidency of Prof. Alden March, will be one of the most interesting of its anniversaries.

The progress of the great national conflict largely interests our profession. One of the most important elements of military success is the medical organization, and in the present war we are in a position to recognise it as the most important. The efficiency of armies depends entirely upon the physical force of the individual soldier, and the latter is in the keeping of the army surgeon. If to the medical staff of an army full power and requisite means be given to preserve health, it has again and again been demonstrated that the health of an army may be maintained even in the most insalubrious districts. At an early period of the history of the British possessions in the East Indies, it was difficult for the authorities to maintain the requisite force to hold the country. English troops were swept off by the diseases peculiar to the climate in a frightful ratio. But England learned the value of hygienic means in the bitter experience of the Crimean war, and has latterly given due prominence to them, with the most satisfactory results. In the recent Eastern campaigns of English armies, a degree of health was maintained, though they passed through the most malarious districts, equal to that of the people in England. Our own experiences during the past year are not less striking. The health of many of our army corps has been preserved only by the vigilant exertions of the medical department. Seconded and aided by intelligent corps commanders, the army of the Cumberland, which has achieved such great successes, has been saved from scurvy and other wasting diseases, only through the efforts of the medical officers. Our armies in the South-West have preserved a high degree of health when we take into account the insalubrious districts in which they have operated. But this result has been obtained only as the sequel of the labors of the medical department. We could multiply striking instances of the inestimable value of a well appointed medical staff to the efficiency and success of our armies. But our object is merely to show the necessity that a higher and more influential position be assigned to the medical element in our military organization. We regret to add that there has not only been no advance of the army medical department in the favor of Government, but that its position is to-day more anomalous and humiliating than ever. The chief of the staff, the SURGEON-GENERAL, is an exile from his official seat without known cause, and all the affairs of the department are, without preparation or consultation, intrusted to other hands.

Medical Directors who have the power to swell the ranks of the army with stalwart men, still occupy most subordinate positions. Their rank is most inferior, and they have only advisory powers, and even these they are seldom allowed to exercise. Instead of meeting the board of war as an equal in rank with commanders, and adding their invaluable opinion as to the expediency of great movements, they learn only casually of the projected change of position, and merely adapt their plans accordingly. The regimental surgeon, still more isolated, faithfully follows his command to the field of conflict, participates in all its dangers and hardships, but without the slightest encouragement of being rewarded by promotion. He sees inferior officers of the line rise from position to position for meritorious services, but no such distinction ever awaits him, though he spend a lifetime in the army, and serve on a thousand battle-fields.

The medical department of the army has performed its duties faithfully, and deserves well of Government. With wise forethought and commendable discretion it has used its meagre powers for the promotion of the welfare of the army; and with eminent success.

The only change which legislation has effected in the medical staff is the enlargement of the corps of sanitary inspectors. This was a most desirable addition, as it gave greater scope and effectiveness to a branch of the service on which depended in a great degree the health of the army. The new Inspectors were, for the most part, men of good professional reputation, and qualified for their duties. The corps, as appointed, remains intact, with the exception of one member, PROF. F. H. HAMILTON, who left the service in August last. He was succeeded by DR. LE CONTE, who is well known as a scientific man. During the year an important change has been made in the head of this bureau. Medical Inspector-General PERLEY resigned his office, and was succeeded by Surgeon J. K. BARNES. Recently DR. BARNES has been appointed ACTING SURGEON GENERAL, and DR. J. M. CUYLER has been appointed ACTING MEDICAL INSPECTOR GENERAL. These changes in the Department of Sanitary Inspection have added much to the effectiveness of the service.

The past year has been remarkable for the number of original American medical works which have appeared. The greater number belong to army medical literature, and are works of more than average merit. Re-publications have not been as numerous as formerly, and for the most part consist of new editions of old works. The periodical medical literature has shown no improvement. The year has proved unfavorable on account of the advance in the price of material, and the inability of publishers to raise the terms of subscription. Our necrological record is not large, but it embraces some eminent names; WATSON, CAMMANN, HARSEN, HILDRETH, HARTMAN, are among the number of those whose loss the profession at large must sincerely mourn.

THE WEEK.

VIRCHOW has given to the medical world a new and very important work on "pathological tumors;" the first volume is just out, the second is to follow in February next. In the preface to Vol. I., he says: "I succeeded in fulfilling the immediate object which I had proposed to myself in thirty lectures, delivered during the months of November to March. The prefixed date of the individual lectures will show to those who take an interest in such matters, that even on days when important debates took place in the House of Deputies I always came up to my duty as teacher. For the satisfaction of my friends I may add, that the quiet and often unnoticed labor of the student requires a larger amount of strength and application than the more loud, and in consequence, generally, more grateful activity of the politician, which frequently appeared to me, at least, like a recreation." It may be hardly necessary to add that Virchow was a renowned leader in the ranks of the opposition in the Prussian Chamber of Deputies.

WHILE the Circular of the *Morton Testimonial Association*, asking for the co-operation of New York physicians, is being extensively diffused among us, it is but right to call the attention of the profession to the late suit of "Morton *versus* the N. Y. Eye Infirmary." Dr. Morton, after having levied tribute upon the New York City and Bellevue Hospitals, applied to the Managers of the N. Y. Eye Infirmary for compensation for their use of his so called "patent," which demand they, under the peculiar circumstances of the case, thought fit to decline. A suit was accordingly commenced by Dr. M. in the U. S. Circuit Court, claiming damages in the modest sum of $50,000. After hearing testimony, Judge Shipman charged the jury against the claims of the plaintiff, contending that, as ether had been long used in the practice of medicine, the new application of it to the purposes of anaesthesia could not be regarded as a just claim for a "patent." The plaintiff was consequently nonsuited. A knowledge of this fact will hardly tend to advance the interests of Dr. Morton in this region, or to excite for him the sympathies of the Profession.

Correspondence.

THE STATE OF THE PROFESSION IN THE COUNTRY.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—A week spent in an interior city of this State during the past summer, suggested the present communication. The city alluded to is situated about the centre of the State, contains a population of over twenty thousand, is one of the oldest, and reputed one of the wealthiest in the Empire State. In visiting such a place I certainly anticipated finding something of professional interest, and witnessing the successful treatment of some of those local affections, which are usually objects of interest to the physician residing in some other section of country. But though the summer was, as I was informed there, one of more than usual sickness, I came away without learning anything of interest. The prevailing epidemic at the time was a very severe form of putrid sore throat, universally styled diphtheria. In the treatment of the subsequent general prostration of such cases, I found the pyrophosphate of iron extolled by some as one of the latest and most valable discoveries of science, and even this, though now so long in successful use, was entirely unknown to several.

From such a visit I have certainly nothing new to communicate, but I wish to make a few remarks on what I suppose to be the prominent causes of such backwardness in this age of professional and scientific progress.

First, I would notice the want of social and professional intercourse amongst practitioners. There were some twenty or more regular practising physicians, well educated, though I cannot say well read, for their education was all of the past, whilst their reading of the later discoveries in science and practice was of the most limited kind. In a few offices I found the "*Medical Times*," in still fewer the "*Lancet*," while many were wholly strangers to any of the medical publications of the day. With such a large number of physicians there was no professional society, where an interchange of ideas and experience would create and sustain that taste for investigation and study so necessary to success. Success, in the more contracted sense of the word, pecuniary, is, it must be admitted, attained in some isolated cases by the most ignorant pretenders. Yet success generally and professional reputation (the dearest object of a well educated physician's ambition) is only attained by unrelenting study. Besides, all agree that there is no profession more slavish or trying than that of medicine when pursued merely as a means of living. The clerk in a store with a fixed salary, or even the daily laborer, whose work ends at six o'clock, may well be envied by the practising physician, who toils both bodily and mentally for a precarious subsistence, from early morning until late at night, and is then subject to the call of any or every one from night to morning, if his profession is not endeared to him by some higher aim and his labor lightened by scientific thought. Much as we may be given to study, when fresh from college, most men will gradually relax their reading and lose that taste, when surrounded by the sterner duties and struggles of life, if not encouraged by the interchange of thought and stimulated by intercourse with others of similar tastes and acquirements. In a city such as that of which I am now speaking, a society, meeting once a week, or even once a month, is more needed amid the drudgery of medical practice than in any other profession in life. It not only excites an interest for the time, but also creates, not simply a taste but a necessity for more liberal reading. Another local peculiarity, which seemed rather strange, was that physicians all kept a large stock of medicines in their offices, and invariably supplied their patients, at the rates of twenty-five or fifty cents, according to the quantity of pills or powders dealt out. This certainly is reducing the profession to the position of mere pill venders, and was rather a humiliating sight. A great part of the physician's time in his office was spent, not in reading, but in compounding nostrums (for in many cases they deserved no other name), but which were ultimately sent out in the crudest forms. On expressing surprise at a medical man's wasting his time in this way instead of sending his prescription to the apothecary, various reasons were assigned. Some said they could not change from the old system, without a loss of practice. Still they confessed that in many cases they never got paid for either advice or medicine. Others said that there were no apothecaries in the city capable of compounding their prescriptions. This led me to inquire into the state of pharmacy in this place. And while I found it backward, as might be expected from the foregoing causes, it compared favorably with the sister profession. On the principal street there were some eight or ten establishments for the sale of drugs, paints, groceries, and what not. In two of them I found the proprietors graduates of pharmaceutical colleges. One had but lately arrived there, and was so thoroughly disgusted with the position of his profession that he was anxious to leave the town. The other displayed in his store diplomas worthy of a better location; and both agreed that cheapness was the only means of securing the patronage of their physicians. It is not surprising that the profession of that city was quite unsuccessful in the treatment of disease, and that most of the practitioners were decidedly sceptical as to the efficacy of their remedies. They never reflected that they could not expect much from medicines kept for months at the apothecaries' shelves, and still longer in their own offices.

Cannot suggestions through your columns lead to the formation of medical societies in all cities? I have no doubt, results would in time follow, conducive not only to the immediate benefit of those joining such societies, but also elevating the general status of the profession.

Yours, etc.,
Medicus.

OUR RELIGIOUS CONTEMPORARIES AND QUACKERY.

(To the Editor of the American Medical Times.)

Sir:—It is with the deepest regret that we see the so-called religious papers, even some of those who for a long time kept themselves free, now prostituting their columns in the interest of quacks and quack nostrums. It is bad enough that these brazen-faced pretenders meet us in almost every column of our secular papers, but they must also invade those which come into our families under the guise of religion, and are put into the hands of our children.

The real object of most of these universal remedies, when plainly stated, is to cure diseases arising from venereal excesses, syphilis, and among females to remove the results of regular or illicit intercourse.

Where shall we look for an honest support to morals and religion if our best papers desert us?

What is the purpose of the gambling house or hell?—*To obtain money.*

What the purpose of the brothel?—*To obtain money.*

What the purpose of the quack, and his vaunted remedies?—*To obtain money.*

What the purpose of our secular and religious papers, in thus prostituting themselves?—*To obtain money.* And in each case we affirm it is obtained at the sacrifice of right, of truth, of justice. N. B.

New York, Dec. 22, 1863.

Medical News.

Mr. Barwell's Apology to Professor Gross.—In the London Lancet of Dec. 5, we find the following prompt apology of Mr. Barwell. He says:—In justice to Dr. Gross, of Philadelphia, whom I have unintentionally wronged, I must beg space for the insertion of this letter. Dr. Gross has written to me complaining that in a note appended to my third lecture "On Hip-Disease" (The Lancet, Oct. 17, 1863) I had accused him of appropriating some woodcuts from my published works without acknowledgment, and the eminent author points out that in his preface my name is included amongst a list of surgeons to whom he is indebted for a certain number of his illustrations. The statement of Dr. Gross is perfectly correct, and I have done him a great injustice. The fact is, that I had the second volume of his valuable and laborious work in my possession, but not the first. Finding many of my woodcuts used, and no acknowledgment appended, I concluded these illustrations were not acknowledged, and it did not occur to me to look for my name in the preface. In this I was wrong; and I beg to state that Dr. Gross has made all due and necessary avowal of the borrowed woodcuts. I trust that he will pardon the error into which I very unwittingly fell, and which I now most willingly retract.

Virchow's name again occupies a prominent place in the debates now going on in the Prussian Chamber of Deputies. "He spoke in his usual sarcastic and telling style, denouncing the system of warnings and the stupid and ignorant annoyance to which the Prussian Press has been subjected for nearly half a year at the hands of the local authorities."—*Brit. Jour.*